THE AMERICAN FARMER,

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . *Virg.*

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THE AMERICAN FARMER

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WORK FOR OCTOBER.

The Agriculturist who properly improves this *month*, will find by the time it has passed, that it is not one which affords many spare hours, or much leisure, to be devoted to purposes of pleasure or recreation: nor, indeed, should any regret that it is so, —that the necessities of his calling make daily requisitions upon the resources of his mind and body, and that in the fulfilment of these demands, he finds in the month of October ample scope for the exercise of all his industry, all his talents, and all his energies; for *occupation* is, above all things else, that *panacea* which, through its pleasurable excitements, give to the human mind its most invigorating tone, to the human body its strength and power, and nerves the whole man with the capacity for continuous and successful exertion—and especially healthful is *occupation* for all who delve in the earth for the means of food and raiment. But a truce to homilies—and now let us see what should claim our attention

ON THE FARM.

Wheat.—Referring you to our article of last month upon the subject of the culture of this grain, the preparation of the soil, treatment of the seed, method of sowing and quantity to the acre, we must be permitted to urge all who may not yet have seeded their wheat, to do so with all possible despatch, as all *procrastination* now but serves to endanger their prospects of making a good crop, by delaying the period of ripening, and thus subjecting the grain to that direful enemy, the *Rust*. As to the *Smut*, that is a disease so completely within the *preventive control* of every wheat-grower, that nothing but the most culpable neglect can be imputed to him who suffers from a smutty field of wheat.

We have repeatedly published the various recipes for making soaks *preventive of smut*, and we will do so again now, in order to save our wheat-growing readers the trouble of reference.

Solutions made of ley from *wood ashes*, *common salt*, *salt-petre*, *potash*, *glauber salts*, and of *unslacked lime*, *of a specific gravity sufficient to float an egg or potato*, will destroy the vegetating power of the smut balls, and prevent the disease from preventing the succeeding crop of wheat. To make assurance doubly sure, it would be well to wash the seed wheat in pure water before putting it in the soak. To do this, it should be immersed in a hogshead or tub of clean water, stirred round so as to wash off the smut; the water to be replenished until it ceases to be discolored; as the imperfect grains and other seed float on the surface, they should be skimmed off, and fed to the hogs or poultry, it being an object to seed none but sound well developed grains of wheat. The process of washing being over, let the seed wheat be immersed in a soak made of any of the above ingredients, of the strength named, and there permitted to lie for 12 hours, when it should be taken out, and have fresh slacked lime mixed with it until each grain becomes coated with it. Care to be taken that no more seed be taken out of the soak than can be sown during each day. Seed thus prepared for sowing, will not only be relieved from the smut, but will vegetate more quickly and grow more vigorously than that which is sown unprepared. When a means so cheap, so efficient, is within the reach of wheat growers, of preventing their wheat from being smutty, why should any omit the performance of the trifling labor it may give them? The experience of half a century have proved beyond all cavil and doubt, that seed wheat thus treated never transmits the disease, and surely, with such a certain *prevention* within his reach, no farmer should omit to avail himself of it.

See that water furrows be made and kept clear of impediments during winter and spring.

If you have time, try the experiment of subsoiling an acre or two of your wheat land.

Rye.—It is very late to sow Rye; and we would advise those who have not done so, to get their ground ready for seeding, but not to sow their seed until just before the frost sets in; to plow it in three inches deep, then harrow and roll. Thus sown, the grain will probably remain in the ground without injury until forced into germination by the suns and warmth of early spring. The best crop of Rye we ever raised was not seeded until the 24th of November; frost hard and freezing set in that year the following day, and remained closed up during the whole winter, nor did the Rye make its appearance until the 10th of the succeeding March, when it grew off rapidly, matured at the usual time, and made us a fine crop. When sown late it would be well to sow an additional peck of seed to allow for loss by winter.

Fodder and Tops.—Be careful to not only gather these in time, but to stock them secure from the weather. The grass in most places has proved a short crop; hence the necessity of saving every kind of provender that can be fed out to cattle.

Hogs—hog-fattening and *manure making.*—The farmer, who understands farm-economy, will always consider these subjects in connection with each other, and while he may be making his arrangements to take up his hogs for fattening, he will provide them the means of manufacturing manure while they may be taking on fat. Better manufacturers of manure are not to be found; but before they can begin the good work the materials must be provided for them. Therefore we say let the bed of every Hog pen be covered several inches deep with the mould and leaves from the woods, weeds and refuse of all kinds from the fields and the gardens. Such substances when placed in the laboratories of hogs are, in the course of the season, made into valuable manure; the quality of which would be greatly improved, if occasionally through the season, a few bushels of fine charcoal were strewn over the surface of the pens to prevent the escape of the more volatile portions of the decomposing masses, as also to fix the ammonia of the urine and prevent its loss.

It is a well established fact that hogs thrive better, grow faster, and fatten with more ease in *warm* than in cold weather; hence the propriety of putting them up before the hard frost sets in.

In feeding pumpkins to fatten hogs, it is best to cook them, and to add about one-sixth of corn meal to their messes of pumpkin. The hogs should on being first put up have a teaspoonful of flour of sulphur, a head, given them a few days in their victuals, and during the whole time their pens should be every few days supplied with rotten wood, lumps of charcoal, ashes and salt.

Harvesting Pumpkins—Let your pumpkins be harvested and stowed away in a dry place before the frost has a chance of injuring them.

Cattle Yards and Cattle.—Haul into your cattle yards a full supply of road scrapings, marsh mud, peat, mould and leaves from the woods, and whatever other perishable substances you can collect,—spread the whole over them, taking care to have the outer edges higher than the centre. As soon as your pastures may become scant, confine your cattle in your yards of a night, taking care to feed them with some good succulent provender. To prevent loss from evaporation, the surface of cattle yards should be at intervals of a few weeks, strewed over with plaster or pulverized charcoal. It should be a main object with every farmer to have comfortable sheds or stables provided for his Cattle, as by being kept dry and warm during the inclement weather of winter, much less food will answer.

Orchards.—As soon as your apples are gathered, prepare the following mixture and give your trees a painting—take in the proportion of 2 gallons of soft soap, 1 lb of flour of sulphur and 1 lb of Scotch snuff, mix the whole together, and apply it to the body and roots of trees above ground. This will not only destroy the eggs of insects, but prevent injury from mice and rabbits.

Transplanting Orchards.—So soon as the leaves fall will be the time to plant out your orchard. In the selection of kinds be careful to get the best varieties and to buy from some well established responsible nursery-man, in whose honesty you can confide. Grounds intended for orchards should if possible, be ploughed twice, the second ploughing to be accompanied by the *subsoil* plough.

Working Horses, Mules and Oxen.—As the pastures no longer afford a full bite, let these valuable creatures be housed, well fed, and cared for. Animals that work should always receive generous treatment.

Ditching and Draining.—The time is favorable for these operations, and all who have lands which are too wet ordinarily for healthful culture, should go to work and have them forthwith ditched and drained. By so doing, the texture of such soils will be changed, and their capacity for production increased from 30 to 50 per cent., according to the degree of their present wetness.

Sheep.—If you have not already provided yourself with good covered folds for your sheep, do so at once. Sheep which are kept dry and warm will subsist upon one third less provender and yield much better fleeces than if suffered to endure the winter's frosts and snows unprotected.

Buckwheat.—Harvest your buckwheat—as soon as dry thresh out the grain, and carefully put away the straw, adding a peck of salt to each ton; it will make excellent provender.

Out-houses of all kinds.—Let these be cleaned and white-washed.

Fall Ploughing.—Stiff clays are always the better of fall ploughing, provided the ground is *not wet* when ploughed.

Corn Stalks.—Save these for provender for your cattle—if cut into short pieces and *steamed*, they are as good as clover hay for cattle.

Roots of all kinds.—Gather and put away these before the frost has a chance of injuring them.

Fences, Gates and Bars.—Submit these to close examination and thorough repairs.

Having talked thus far on matters connected with the farm, turn with us to the "Horticultural" department, and let us see what we may do there.

SINGULAR CASE OF POISONING.—An inquest was held last week at Melvern on the body of Richard Wilkins, whose death was caused by drinking cider that had been conveyed in lead or zinc pipes from the cider-house to a room where it was drawn—The jury acquitted the farmer in whose employment Wilkins was from any blame, but said that after that investigation any person using similar pipes for the conveyance of cider would be liable to a charge of manslaughter, or even murder.—*Eng. Paper.*

THE USE & APPLICATION OF CHARCOAL.

CHESTERTOWN, JULY 26th, 1845.

To the Editor of the American Farmer.

DEAR SIR:—A gentleman in my neighbourhood who owns extensive bark mills, is disposed to grind Charcoal for the use of the farmers. But we want information as to its action, mode of application, the quantity per acre, &c. Can't you supply all this through the columns of the American Farmer.

P.

Charcoal is a substance which may be said to be indestructible, that is, that it is not subject to decomposition. Therefore, of itself, it cannot be said to be a manure. In its offices, however, it acts as such, and may be said to act the same part as though it were intrinsically manure. When spread over the surface of land which has been manured, as the manure decomposes and parts with its volatile gases, the charcoal seizes upon these gases, assimilates with, retains them for the benefit of the growing plants, giving them out gradually as they may be required by the necessities and wants of such plants. Nor do the offices of the Charcoal stop here, it absorbs carbonic acid and ammonia from the atmosphere, and retains them in the same way as it does the gases which it arrests in their escape from the manure which may have been buried in the soil. It possesses a very powerful attraction also for water, and hence it is, that lands where charcoal may be applied, measurably retain moisture longer than others where no application of it may have been made. The dew, rain and snow are known to contain very sensible traces of ammonia. These, by evaporation, are lost to culture, unless intercepted by some body possessing the power of attraction, absorption and assimilation, and hence it is, that charcoal performs a most potent part, in dispensing benefit wherever it may be applied to the surface. The experiments of chemistry have proved, that such is the affinity for ammonia, of charcoal, that when fresh, it has the power to absorb 90 times its weight of ammoniacal gas, with which it parts on the recurrence of each succeeding rain, by which it is taken or carried into the earth, where it is, by means of the voltaic action of the roots of the plants, taken up into their general circulation, and form the nitrogen so necessary to their growth.

If we are right in our views, charcoal, though not a manure in itself, is a most efficient *caterer* of aliment, and does most munificently provide it for plants. From its known antiseptic powers, we should think it would also exert a very active property in the improvement of the health of neighborhoods, as it would, by its capacity to attract and condense deleterious gases, (which we take it, always superabound in marshy regions) divert them from their unfriendly action upon human health, and probably render them tributary to the production of vegetation. If used, however, for sanitary purposes, it should be applied in much larger quantities than when simply wanted for those of agriculture.

We have spoken of applying charcoal to the surface,—when so applied, it should be sown broadcast at the rate of 20 bushels to the acre. It may, however, be very advantageously used in the Compost heap. If stable or barn-yard, or other animal, vegetable, and earthy bodies, be formed into compost, 20 bushels of charcoal to every 20 double-horse cartloads of such bodies, may be very beneficially mixed therewith. When thus used, it performs a similar office to that which it discharges when applied on the surface; it appropriates to itself the ammoniacal and carbonic acid gases, and holds them in reserve, to be doled out to the growing plants in such proportions as the appetites of those plants may dictate.

PHILOSOPHY OF WHEAT CULTURE.

Dr. Lee, who is one of the most devoted friends of agriculture in America, read a very able paper before a meeting at the State House in Albany, last winter, upon the cultivation of wheat. He calls to my mind that from the analysis of *Sprengel*, the mineral proportion of it amounts only to three per cent. of the whole, and that wood ashes presents very nearly the same mineral constituents and in the same proportions; whence he infers, that the soil most wanting in these constituents, may be supplied with a sufficient quantity for all wheat bearing purposes by a small dressing of ashes. He goes on to say:—

Being but slowly decomposed by the vital action of plants, ashes are an enduring fertilizer when compared with stable manure.—Mixed with quick lime, their good effects are more speedily obtained. Lime will render alumini, either in the soil or in leached ashes, soluble in water, so it can enter the minute pores of the roots. Clay in the soil is always combined with a large portion of silica; and before it has been exhausted by continual cropping it holds in combination considerable potash and soda. Lime, by combining with alumini, the basis of clay, liberates these alkalies and silica, which uniting chemically, form soluble silicates of potash and soda.—These also enters into the circulating nourishment of plants, and are decomposed in the stems of grasses and cereals. The silica goes to make vegetable bone, to keep the plant upright; while the potash and soda go back to the earth, to dissolve, as before, another portion of *sand*, to be also absorbed and transformed into *bone*. It is in this way that a few ashes, applied to a sandy soil, will enable grass and grain to take up the eighty-one per cent. of flint found in their ashes.—Lime will do the same thing on clay soils, for the simple reason that they generally do not lack potash, soda, and magnesia.

"The quantity of lime and ashes, to be applied to an acre, will depend entirely on their cost at the place where they are to be used. A few bushels will be of essential service; but a large dose will be better.

"I come now to speak of the organic element of the wheat plant, which, as I have already intimated, form ninety-six or ninety-seven per cent. of its subsistance. Water and its constituents, oxygen and hydrogen, carbon and nitrogen, are the four elementary ingredients of all cultivated plants, besides their minerals. As there is no lack of water or of its elements, oxygen and hydrogen, our attention will be confined to obtaining a full supply of carbon and nitrogen. These are indespensable, and fortunately nature has provided an amount of carbon and nitrogen in the

air, if not in the soil, more than equal to all the wants of vegetation. A large portion of the fertilizing elements of vegetable mould, in a rich soil, is carbon, and a small portion is nitrogen; both of which are usually combined with other substances. These important elements are often nearly exhausted in fields which have been unwisely cultivated; and I have paid much attention to the subject of cheap and practical renovation. By the aid of clover and buckwheat dressed with gypsum, ashes, lime, or manure, and ploughed in when in blossom, much can be done in the way of augmenting the rich vegetable mould so desirable to a certain degree, in all soils. Straw, corn-stalks, leaves of forest trees, and swamp muck, made into compost with lime and ashes, are of great value. Charcoal well pulverized, and saturated with urine, I regard as the cheapest and most useful fertilizer that can be applied to a poor soil, for the production of wheat or almost any other crop.

"The earths contained in charcoal, as the analysis of its ashes demonstrates, are identical with the earths found in the wheat plant. Coal contains a very large portion of carbon, and will imbibe from the atmosphere a large quantity of nitrogen in the form of ammonia and its carbonates. Unlike stable manure, the salts of lime, potash, soda and magnesia, it will not waste by premature solution nor by evaporation. On the contrary, it is of incalculable value to mix with the liquid and solid excretions of all animals; to absorb and fix in a tangible condition those volatile, fertilizing elements, which are so prone to escape beyond our reach.

"When it is recollected that without nitrogen in some form, it is utterly impossible to grow one kernel of good wheat, and that one pint of the cow, or one quart of that of the horse fed on grain, contain nitrogen enough to supply sixty lbs. of wheat, we may begin to understand something of the money value of this animal product. But mind this suggestion. Nothing is sooner lost than the hartshorn in an open smelling bottle, or a large share of the ammonia in free urine in a warm atmosphere. Charcoal and gypsum will absorb it in large quantities, and give it out to the roots of plants as their wants require.—In feeding plants, great judgment should be exercised. At least one half of the food fed out to them in the shape of stable and barn-yard manure, is entirely lost. It escapes into the air, or is dissolved prematurely, and carried like the potash in water running through a leach, beyond the reach of your hungry, if not starving plants.

"I have just separated a half pound of wheat flour into its proximate elements of starch and gluten. The gluten I have in my hand. It is nearly identical with animal muscle. It forms from seven to thirty-five per cent. of the bulk of wheat kernels. The more gluten flour contains, the more good bread a given number of pounds will make. A barrel of flour rich in gluten, will make ten per cent. more of bread than one which is nearly all starch. Gluten will bear far more water than starch. The quantity of this meat forming principle in wheat depends in a good degree, on the quantity of nitrogen in a soil where the wheat is grown."

Remarkable.—We learn from a late Republican, that "Mr. Benjamin Wheeler," of the firm of Adams & Wheeler, Zanesville, "has a heifer cow two years old, that has not yet had a calf, and she gives regularly, twice a day, half a gallon of milk."

INSTRUCTIONS FOR A YOUNG FARMER.

Church Hill, Md., August 7th, 1845.

To the Editor of the American Farmer.

Sir:—I have taken up my pen to ask you for some good advice in relation to Agriculture, a pursuit in which I am a novice, having spent the most of my days in the arms of my "alma-mater," away from home.

I have lately purchased a piece of land, (convenient to my situation in town) of some one hundred and fifty acres, nearly all of which is tillable. It is wavey, one half is principally sand and clay, with the clay in preponderance, the other half, clay and sand, with the sand rather in preponderance. The whole a common without fence, and covered with a good coat of common grass for pasture. I am now busily engaged in enclosing it with a strong, substantial plank fence in front, and post and cap fence in the rear.

Please inform me of the best manner of putting in my small grain this fall, corn crop next spring, mode of cultivation, alternation of crops, the right use of manures, &c. &c. &c. D

—

Answer.—By following our directions for the month's work in our last number, our friend D. will do the right thing with regard to putting in his "small grain this fall." We take it for granted from the fact of his land having laid out to old field without fence for some years, and being covered with a "*good coat* of common grass," that *rest* and the *depasturing* of cattle of the neighborhood have somewhat improved its fertility, and that it may be in sufficient heart to produce a tolerably fair crop of wheat. But were we its owner, we should not feel sure of that unless we had first given it a dressing of lime, marl, or ashes; for we should presume that its riches had been exhausted before it was turned out to commons. Nor would a couple of hundred of *Guano* to the acre, be in the least out of place. This, however, if applied to newly limed land, should always be mixed with an equal quantity of Plaster to prevent loss by the flying off of the ammonia of the Guano.

The best method of putting in his corn crop next spring, would be to secure a good supply of nutritious manure between this and then, so as to be able to give at least 20 double-horse cart loads to each acre; to spread it evenly, plough it in, pulverize his soil finely with the harrow, and finish by rolling; then lay off his furrows 3 by 4, or 4 by 4, plant his corn, and keep it clean from the start, until he lays it by.

We would, before planting, steep the seed corn in a solution made of 10 gallons of water, 1 lb. copperas, and 1 lb. salt-petre, and as we took the corn out to plant we would roll it in equal quantities of plaster and ashes. And as we planted, we would strew at the rate of from a gill to a gill and a half of plaster and ashes, mixed in equal proportions, over each hill.

As soon as the corn was high enough, we would plough a furrow from the hills on either side, and return it again, clean off the grass and weeds immediately around the plants in the hill with the *hoe*. This

done we would run the *cultivator* at least once in ten days, both ways, until the corn *was* laid by. Should there be grass and weeds remaining around the plants, remove them with the hoe, from time to time.

Let us impress this fact upon our friend D. never to put in more corn than he can manure well, and keep as clean as a fiddle.

As to the "*alternation of crops*," that must be governed by circumstances; no system, however, should be considered good, which may not be based on clover. With respect to the right use of manures, that question is too indefinitely put, to justify our reply. A word or two of advice, however, we will venture upon. It is, that he should collect all the manure he can, protect it from the weather until he may be about to use it, and when about to take it out to the fields, to spread *one* bushel of plaster on every twenty double cart loads of it, then to plough it in, and having done that he may rest assured that the manure will repay him for his trouble and expense.

If our friend D. desires to build up a *permanent improvement* of his land, he must lime or marl it, and if possible apply ashes to it. If his land is poor, fifty bushels of lime, or 150 bushels of marl, will be enough for the first application—but under any circumstances he may apply 100 bushels of ashes. Should he not have stable, barn-yard or other nutritive manure at command, he may plough in buckwheat very advantageously. To ensure a good crop of buckwheat to plough in, let him sow half a bushel of seed per acre and apply one bushel of plaster per acre.

Sowing Grass Seed.—The following which originally appeared in the *New England Farmer*, contains very just views upon the subject:

"The results of sowing grain and grass is to injure both crops, and very often to lose the grass entirely. Such loss and vexation may be avoided by sowing the grain alone, early in the spring with such manure as has been allotted for the field; and as soon as possible in August, after the crop of grain has been housed, to plough the stubble in, turning a good furrow, that the stubble might have a chance of mouldering away, which the showers usually taking place about that time, and the heat of the weather, will generally bring about in the course of 12 or 15 days; before the end of August the field should be cross-ploughed, the grass seeds sown on the furrow, harrowed and rolled. It is of much importance in this part of the process to avoid any delay, and therefore it is quite needful to put in the grass seeds, even if the weather should happen to be dry at the time; they will lay safe in the ground, and be ready to improve the benefit of the first showers, when the grass will make its appearance, and generally make a good progress before the winter sets in. If the winter should prove favorable, nothing further is wanted to secure a good and lasting field of grass, than to draw the roller over it in the spring, as soon as the frost gets out of the ground; this will settle the roots of the young grass, which the frost will always heave up, and which without rolling would be exposed to suffer from exposure to the sun and wind. In case that the winter should prove changeable, with cold turns and successive thaws and hard rains, then the grass will be exposed to suffer, by being killed in spots, perhaps some of it washed away; of such cases it is needful as soon as the frost is out of the ground, and it is not wet, to harrow the field over, and sow some fresh seeds."

Effect of Nitrate of Soda on Grass Lands.—Mr. Ebenezer Bishop, of Seekong, says he has been making use of *nitrate of soda* on his grass lands, and he thinks it has greatly benefitted his crop. He has sown 100 lbs. broad-cast, to the acre, and he thinks he has four fold the grass that he would have had without it. He states that there is danger of killing vegetation if too much is sown.

Mr. Bishop's lands, consisting of a sandy loam, are the right kind of soil for the application of such substances. Ashes, potash water, pearlash, soda, &c., cannot fail to aid such a soil, and we should not marvel to see a quadruple harvest on sowing 100 weight of nitrate of soda upon an acre of it. We have never made trial of this article on our own grounds, but others have tried it with success.—*Me. Cultivator.*

The Irish Potato.—The following facts, communicated by the Rev. *Ezekiel Rich*, late of Troy, New Hampshire, to the Genesee Farmer, very justly and briefly sets forth the value and virtues of the Irish Potato, a vegetable for which there is none other that could be substituted:

"For recommendation of this root, and encouragement in its cultivation, I will now state some of its more observable qualities:

1. It does not too highly excite the human appetite, and thus render it, like many other things, out of due proportion with the powers of digestion. This is indeed a grand affair in the province of temperance and health. Even the best varieties are not liable to be eaten to excess.

2. There is probably no kind of food that has a more just and healthful proportion of bulk and nutriment. Its soluble and nutritious matter is said to be 25 per cent.; whereas that of barley is 83, wheat 85, rice 90, beans and peas from 89 to 93. This fact renders it easy of digestion, and unlikely to surcharge the system and produce dyspepsia.

3. The potato, like milk, contains just such a proportion of aqueous substance combined with its nutriment, that it is, for both man and beast, both food and drink. This is a great convenience.

4. It is very easily grown and cooked; of course it is a very cheap article of food. Hence it goes towards supporting a dense population, and is a great blessing to the poor.

5. It does not exhaust the soil like most other vegetables, especially oats and turnips, and leaves it in a good state for the succeeding crop.

6. New varieties and the best, are easily obtained from the top-ball seeds; taking however, about three years to bring them to maturity.

7. It is very easily preserved, whether dried like fruit, or not; whether reduced to its farina or starch, or kept in its original state."

Smart weed, either green or dry, is an excellent medicine for horses in several diseases, particularly for a cough. Feed them as with grass or hay.—Every farmer who has this weed or herb, growing on his premises, should cut, dry, and save against time of need.

R. SINCLAIR, JR. & Co's. CORN & COB CRUSHER.

THE VALUE OF CORN COBS AS A FOOD FOR CATTLE.

When it is recollected how many hundreds and thousands of bushels of corn cobs are annually thrown away, or wastefully used as fuel, it becomes a matter of deep interest to every corn grower to know the degree of value to which this offal of the farm may be entitled to be considered as food for cattle. Does corn-cobs possess properties of nutrition? If so, are those properties sufficiently concentrated to render them safe and efficient food? These questions are important, and particularly so in those years when there may be a scarcity of long feed, as hay, tops and fodder, and fortunately for the solution of these questions, a most accurate test—a nicely conducted experiment—was made many years since by P. Miner, esq., of Ridgway, Virginia, and communicated at the time to the Agricultural Society of Albemarle county of that state. His experiment was conducted by distillation, probably the surest way of testing the degree of nutriment contained in the substance submitted to the test of experiment, and the result of this experiment is entitled to the more consideration, as it was undertaken at the request of a member of the Society, with the express object of determining the relative proportions of nutritive matter in the *grain* and *cobs* of the Indian corn.

Mr. Miner says the experiment was carried on under the eye of an experienced and intelligent distiller, and was as follows:

Ten bushels of the corn and cob ground together were taken, which weighed 367 lbs., and 10 bushels of pure corn meal were taken, which weighed 400 lbs. They were both brewed or mashed on the same day and distilled separately, with great care and accuracy. The product of the pure corn was 18 gallons, and the product of the mixture, or corn and cob was 13 gallons of spirit, each of the same degree of proof. Now it is generally agreed that the cob constitutes about one-half of the bulk of corn—in other words, we give two measures in the *ears* for one shelled, and the cobs are either used as fuel, or thrown away as of no value. If this were true, the product of the mixture then should have been only 9 gallons, which is the half of what the pure corn produced. But 13 gallons were obtained, 4 of which must have been, of course, extracted from the cobs; or if we estimate its nutritive power by the quantity of spirit, it is clear, that whenever we shell 10 bushels of corn, and throw away the cobs, we throw away a portion of food equal to the difference between 9 and 13, or nearly one half.

Mr. Miner further remarks:

As it relates to the respective weight of each, the difference in favor of the mixture is still greater, the pure meal weighs more than *three* pounds heavier in the bushel, and I am inclined to think that the product of the mixture would have been greater if the experiment had been made earlier, it was made in March. The distiller mentioned an important fact that occurred in the process. He found that the fermentation of the mixture took place much sooner, and was perfected a day or two earlier than the other: that it mashed much easier and better than any thing he had tried before, and which he accounted for by supposing, that the particles of the cob being lighter and coarser than those of the grain, when mixed together, prevented too close and heavy a deposition of the mass at the bottom of his brewing tub.

This experiment of Mr. Miner's, accurately and nicely as it was conducted, does not settle the question as to how much nutriment the *cobs* contain—it only settles that, of how much spirit they will make—and what is their relative value for the production of spirit when compared with the *grain*. It proves that while 10 bushels of *meal* made from the *grain* made 18 gallons of spirit, the same quantity of meal made from *cobs* and *grain* made 13 gallons, and, of course, that the 5 bushels of cobs yielded 4 gallons of spirit. Besides the principle of *alchohol* to be found in all *grain*, and most vegetables, there are other substances, or principles in all, possessing nutritive properties—among these, may be enumerated the saccharine and oleaginous properties, of infinite value, not only in the *sustenance* of the animal system by the elaboration of carbon, but in the production of fat, as these are known to be active agents in these particulars. And besides these, there are other principles which contribute to the formation of flesh, muscle and bones. Without reference to the chemical analysis of the corn-*cob*, of which we are not aware that one has been made, we take it for granted, that, as it contains four-ninths as much spirit as does the *grain*, that its elements bear a proportionate relation. But we are not left to conjecture as to its value; because the experience of every one who may have lived in the neighborhood of a distillery, will have taught him that the residium, after the spirit is extracted from the grain, familiarly called *distiller's slop*, is used advantageously in the *fattening* of swine, and that when fed to milch cows, though its fattening properties are not so apparent with them, it is eminent-

ly conducive to the secretion of milk, and that when fed in connection with fodder or hay, never fails to keep them in good heart and condition. But to return to the *corn-cobs*. We have already shown that so far as *spirit* is concerned, that they yield nearly half as much as the grain itself, and we think the inference a fair one, that if they were reduced to *meal*, submitted to some cooking process, and incorporated with chopped fodder of some kind, that they would be found for *cattle*, to be fully equal to half their quantity of corn, whether regard be had to their general health, the formation of flesh, muscle, bone and fat.

We conclude, therefore, by the expression of the opinion, that every corn-grower should save his corn-cobs for his cattle, and that to render them available, he ought to provide himself with the means of reducing them to cob-meal, if not that of cooking them also.

GOOD AGRICULTURAL RULES.

"Whatsoever thy hand findeth to do, do it with all thy might."

The above injunction, which is to be found in *the* book of books, if it had been written as a *rule* for the guidance of agriculturists throughout all time, could not have been more happily adapted to the business, circumstances, and duties, of those who derive their living by the cultivation of the earth. Wisely does it prescribe, that that which is to be done should be done with all the might within the physical ability of the laborer or he who may direct the labour of others. True, indeed, is it, that the work of the farm, when necessary to be done, should be commenced and completed without let or hindrance, for unless the entire "might" of the operator be brought to bear upon the preparation of the soil, the putting in his seed, or the tending of his crops, disappointment will inevitably be his portion, for neither the seasons, nor the weeds of the field, will await the tardy operations of the sluggard. That which should be done to-day, never should be delayed until to-morrow, as a change of weather, ere to-morrow may come, and put it out of our power not only to then act, but delay exertion for days, during all which time crops may be suffering—nay they may suffer on until the point of safety shall be past.

We will conclude in the language of our text—"Whatsoever thy hand findeth to do, do it with all thy might"—*do it at the right time, and do it well, for that which is worth doing, should be done in season, and done well.*

MADDER IN OHIO—Mr. Swift, of Lorain co., from 9 acres, produced 2000 lbs. Madder per acre, which is more than an average crop in Germany or Holland.

The last crop of Louisiana Sugar,—ascertained by careful personal inquiry on each plantation,—was 194,346 hogsheads, making a net weight of 204,000,000 pounds. The crop of Molasses is estimated at 9,000,000 gallons.

JUDGE P. ROST'S ORATION.

We have received an oration delivered before the Agricultural and Mechanics Association of Louisiana, on the 12th of May last, by Judge *Rost*. After paying a just tribute to the services rendered by professor *Liebig*, to the science of agriculture, who, the Judge says, has systematized what was known, and pointed out to his successors the true path of discovery, he remarks,—taking for granted that the substances which are invariably found in a plant, are necessary to its perfect development, Liebig has shown which of those substances were supplied by the earth, by the atmosphere and by rain-water; that he has proved that pure vegetable mould, which has been considered as the only agent of vegetation, had in it but a secondary and not an indispensable agency, and that the results assigned to it were produced by carbonic acid, water and ammonia, or rather nitrogen, and certain mineral salts which the earth supplies; that he has discovered that in sugar bearing plants, carbonic acid is the source of saccharine matter. The Judge could not enter into a detailed examination of the author's views, but he attempted to show some of the results to which his theory would lead in the cultivation of the cane, by which his auditors would be pleased to find that good planters fulfil all the essential requisites of science.

Sugar-cane, analyzed with great care, and in various seasons, by Mr. *Avaquin*, is found to contain in proportions, not material to the present enquiry, the following substances, which, according to Liebig, are supplied exclusively by the earth, acetate of potash, phosphate of potash, chloride of potassium, phosphate of lime, silica, sulphate of potash, chloride of potasium, and acetate of lime. These, remarks the Judge, as well as carbonic acid, ammonia and nitrogen, are hard names; names new to most of us; we must learn their import. Twenty-five years ago we knew not the meaning of piston and cylinder, of steam-chest and safety valve. We all know it now; and as the application of steam to the mechanical arts, has not wrought a greater change than the recent discoveries in Agriculture are destined to effect, we will have to sharpen our intellects once more and *raise them to the level of the times.* Upon this however, the Judge does not at present insist, but asks his auditors to take the mineral salts he had mentioned, as things which being invariably found in the sugar-cane, and never in the atmosphere, or in rain-water, should exist in the soil in a state fit for assimilation by plants. Lands, he maintains, must contain in that state, potash, silica, lime, chlorine, phosphoric acid, sulphuric acid and substances yielding ammonia, and should any of these be wanting they must be supplied by deep ploughing or by manure.

We have thus sketched the substance of a few sentences of the Judge's oration, to show its character, and will remark, that it is an able production, replete with sound practical views, and will be read with delight.

The Judge recommends thorough draining and deep ploughing. These means he thinks, will give to land that cannot be manured, all the substances which the cane requires from the earth but one; it will not give a sufficiency of nitrogen, which he is satisfied can be supplied in great abundance by a process which has long been followed without any clear conceptions of its mode of action. He means that of covering the land with peas as early in the

summer as the corn crops will permit. One of the advantages of peas, as a green crop, is, that they take from the land *none of the alkalies* which the cane requires, whilst their powerful system of roots has a tendency to accelerate the disintegration of the soil; their principal action however, consists in shading the land, thus preventing the escape of ammonia which the rain-water deposits in it, and hastening by shade and humidity, the decay going on at the surface, and the formation of nitre, which ever follows it in warm climates. The leaves and seed of the pea are richer in nitrogen than any other vegetable substance, and the result of their decay is the formation of additional quantities of nitric acid. The nitre and nitric acid thus formed, as well as the ammonia retained in the soil, yield to the following crop of *cane* the nitrogen they contain. The method now generally adopted of plowing in the field trash, restores to the rattoons, in a state fit for assimilation, most of the alkalies which the plants took up in their growth; and should more ammonia be wanted, by setting fire to the field trash after a rain, the top part of it is converted into charcoal, which has the power of absorbing ninety times its volume of ammonia. This part of his address the Judge concludes by recommending *thorough draining and subsoil ploughing*—two admirable agents in the melioration of land.

For the American Farmer.

TO THE YOUNG FARMERS OF MARYLAND,

Essay No. 3

On Practical Agriculture.

PLOUGHING.

There is perhaps, more *true* philosophy in the study of the details of agriculture, as the constituents of an acknowledged science, than in grasping at half revealed shadows of possibilities, either in the moral or natural universe; for at best these are but unprofitable and vague speculations, reared upon the frail fabric, termed human intellect, and rendered extravagant by a morbid fancy, seen as through "a darkened glass," if *seen* at all, but more frequently the chimera of a diseased state of the moral perceptions. How *little* will Newton feel himself to be in *that Presence*, whence originated, "Let there be *light;*" and what blasphemy would he not esteem it, if he be so blessed, could he know that *that command* had been quoted in his praise, by a fellow worm!

Let *us* then, "study to be quiet," in relation to matters beyond human ken, and which will ere long, to each one of us, be revealed in all their eternal resplendence; humbly trusting we may have strength imparted us *then*, to bear the *light* of *perfect* day—and yet, we are to pursue with all diligence our several callings here; and it becomes *us*, young men, even more than the aged, to progress systematically in the acquisition of knowledge, and practical improvement, both in our minds and estates; and it is this desire to contribute my mite, in the furtherance of so noble a cause, which urges me to address you yet again.

The subject of the present essay, demands of all others, the nicest attention. It is emphatically *the Philosophy of Agriculture*; yet spite of this mere truism, how frequently do we see hundreds of exhausted, if not naturally barren acres, barely scratched over, the grain cast at random on it, scarcely covered in with the harrow, and never rolled; while the complacent *owner* (for I cannot say *husbandman*,) saunters to some party gathering, or wastes his time and *credit* at some public sale of surplus trumpery; boasting of his acres in this or that crop:—

"How much manure—lime, ashes, or dung, did you put on your hundred acres of corn?"

"Oh! why—that is to say—it was in pretty fair order!"

"What had you in it last year?"

"Why,—oats."

"With pray, what yield?"

"About a thousand bushels, I reckon"—consequentially, with a roll of his quid *to the other side of his mouth.*

I would be ashamed to see even my *nomme de plume*, over a recommendation to plough *shallow*, let the soil be thin or deep. If the former, however, I would not advise deep ploughing with the common surface plough, the first assay—Turn up a furrow just the depth of the soil naturally, follow this with a one-horse *subsoil* plough, adding say, five inches to your five of super-soil, by which you will at least obtain a *permeable body of soil, ten* inches deep, instead of only *five.*

In many of the chalk districts of England, this fossil, nearly in a state of purity, is frequently subploughed as a mere receptacle of superabundant moisture, or temporary substitute for under draining.

In its least favorable aspect, subsoil ploughing, it must be admitted, *may* be of service, and *cannot* injure the growing crop, and that the roots of many species of vegetation, *may* penetrate an otherwise adamantine strata, and find something palatable.

But let us test it in the crucible of reasoning, abjuring all affectation of chemical erudition—There can be no doubt but that soils, as such, and simple earths, wherever discovered, latent, as soon as exposed to the action of the gases composing common air, and of those imponderable, but active agents, solar light; electricity, and caloric—(for cold and heat are merely comparative terms, to express depression or appreciation of caloric)—exposed to these novel influences, it is natural to suppose it endeavors to accommodate itself to its new position, and at once a chemical process commences, of some kind,—decomposition, evaporation or assimilation—what, I believe, has not been precisely ascertained, and which must vary under different circumstances. It may absorb more nitrogen; have its acidity neutralised; some of its salts precipitated, or obtain carbonic acid from rain-water—whatever may be the process it undergoes, there can be but little doubt that all surface soil has *acquired* that darker colour than its subsoil generally presents—and that in time, by being blended with the surface soil, and vegetable deposite, the subsoil will become a part of what we commonly mean to express, when we say "the depth of the *soil.*"

That there are some stimulant virtues in all subsoils, there can be no doubt, for a shovel full of earth from the bottom of a well, applied to and *mixed* in a hill of corn, will manure it; whereas, were a hill of corn planted on a bed of this same earth, cold and inanimate as yet, it would not even germinate.

Reversing our proposition; a shovel full of the most fertile mould, removed from the action of solar light alone, as in a cellar or even under a shed, loses for the time being, all its reproductive principles.

But my desire is to be perspicuous and strictly practical—deep ploughing can do no harm; may increase our crops, and costs but little more than shallow culture.

There need be no dread of your manure *sinking*, or if it does, *depend on it that the roots will sink too.* Besides, by ploughing *still deeper next time*, you will turn it up again, as so much clear gain!

In alluvion bottoms, where the same characteristic inorganic substances continue to an extreme depth

and also in deluvian formations of marine shells, and other calcareous properties, the subsoil should be thrown up *with* the surface soil, by a still increasing depth each time it is ploughed—Indeed, as a certain degree of exhaustion obtains in all old lands, the super-soil might be replaced entirely by the subsoil, to advantage, by a heavy common plough, reversing, by burying the old surface.

In breaking up an old meadow, particularly, if, as usual, it be desirable to eradicate every vestige of vegetation then on it, in the process of cultivation; let the ordinary plough be set just deep enough to divide the mass of grass roots, say five inches deep; turn over a flat sod,—each furrow taking the place precisely of the one just before removed—roll it lengthwise, perfectly flat, and then harrow it lengthwise, so as not to *disturb* the sod, but to expose it to the direct action of the sun's rays, and deprive it of all vitality. The sod should not again be disturbed until it has entirely decayed—it should then be cross harrowed, heavily; cross or diagonally ploughed three inches deeper than at first, (the latter culture preferable, as it both cuts and splits the old furrow—) sub-ploughed at the same time, and rolled and harrowed each way. By this process the original surface is restored, with its powers renovated by additional vegetable manure, to receive the seed, which, should there be time, ought not to be sown until about two weeks afterwards, when, if winter grain, a finely pulverised soil will be had to plough it lightly in.

We have authority for *fall ploughing* as remote as the days of Solomon; who says:—

"The sluggard will not plough by reason (on account) of the cold; (or winter,) therefore *he shall beg in harvest.*"

Nor can there be much remaining doubt on this oft mooted point, while it presents many good and sufficient reasons for its general adoption; among which are more leisure after seeding, to prepare your fallows for cross ploughing the next spring, should time offer; and if there be no time to cross plough an already broken field, surely there would have been none to plough a sod. Those powerfully fertilising agents, atmospheric air highly rarified, or oxiginated, in winter—snow, containing many ameliorating principles, and frost, that most effective of all pulverisers, are all successively at work, while the rest of nature reposes for a season. A cross or diagonal ploughing in the spring, always followed by the sub-plough, completes the process; restoring the original surface, with its decayed vegetable matter and regained salts.

Gentlemen, I am not urging fall ploughing because I have always practised it myself; on the contrary, having been behind my work, owing to causes alluded to in my introductory, I am still suffering for it, and have now resolved to plough every acre this fall, I shall need for spring crops—as I shall seed no more than I *do plough this fall*—and here it may not be *hors du place* to remark, that the only way to get up with your work, is to forego planting some contemplated crop, say one of the short crops—buckwheat, turnips, &c.—*and commence your ploughing for winter grains, when, had you not resorted to this plan, you would only have been preparing for these comparatively valueless crops.*

The object in ploughing, in the abstract, is to displace a comparatively unproductive, solid soil, and prepare it to yield more, by culture and pulverization—spading is the most perfect way to effect this, and *when labor is low*, is practised to a considerable extent—as in Ireland, where numbers of *acres* are spaded for potatoes, &c.; but we can scarcely wish the day to arrive when *we* can profitably adopt it—I have a vast deal of faith in minute pulverization, but cannot consider it a substitute for artificial manures; to accomplish this in the most simple, and consequently best manner, *cross plough* with a plough that throws up an edgewise furrow, which roll or drag immediately lengthwise, then harrow and roll crosswise—reharrowing before seeding, lengthwise; cross-harrowing the seed in, and rolling as ploughed, *after* opening the lands and water furrows.

It is very important that the ground should be in exactly the proper condition to be ploughed, and where the season presents a *choice*, it should be made a matter of serious care. Clay soils should be made neither very wet nor dry, but a mean, inclining to dry, so that it will be disposed to *crumble* somewhat: but it should never bind on the plough, or break out in cakes, like bricks, for still like them, it will be baked hard, and become unmanageable for at least six months. Alluvial soils may be ploughed at almost any time, for it rarely freezes deep in this latitude, and is never too wet—Sandy soils should incline to the side of the wet, if anything, to give them consistency and weight.

The best rule is to put the plough in, and pay strict attention to the accomplishment of the *first great principle in tillage,—pulverization*—for if the soil, of whatever description, be not in a condition for accomplishing *this*, it cannot be made to yield in proportion to *its actual degree of fertility*, as the more minute the particles of soil are, the more immediate will be their contact with the roots;—and such inorganic substances as it may contain, will be more evenly distributed.

All fields ought to be so ploughed as to have a tendency to level them, by filling up cavities and cutting down ridges.

As to the mechanical act of plowing, your team should be *heavy*, but not too *swift*: pulling steadily, and not by "jerks;" for this reason, oxen, in most soils, are preferable to horses. Your ploughman should be both strong and active, for although less reliance should be placed on main strength than on slight, a weak hand is apt to let go the handles, in preference to sustaining *his share* of the shock, should the point come in contact with a stump; when an active, strong man, would by *easing off*, release the plow and prevent injury to the team.

There is no country where the appliances for tillage, have arrived at greater perfection than in the United States—in Germany where agriculture has attained to greater perfection than in England even, many of their implements are still of the rudest construction; this holds in France also—so that *we* have no excuse, for not availing ourselves of the use of our nearly perfect and cheap agricultural implements.

In conclusion, gentlemen, I assure you it does me as much good, to see a first rate plough turn up a *smooth, deep* furrow, *now*, as *it once did* to see "Old Cook Sam" cutting out ginger-Cakes at Christmas, and I regret exceedingly lacking their *necessary qualifications* for a *bona fide* practical ploughman.

By all means then, let us adopt without delay, some effectual means to compass this end, and as soon as our winter grain is all in; say after the 10th of October, rig up every plough team we can, and break up ground as long as the weather permits, and we have it to do. As I mean to *follow* the advice I give, I will now close, and subscribe myself still, yours sincerely,

CINCINNATUS.

Typographical errata in Introductory—for *boom-*

ing, tenth line, read *looming*—for *parcels*, in fourth paragraph, read *panels*—for No. 8, read No. 1, subsoil plough—for *swarth* of *full* mowing, last line, read *swath* of *full* mowing.

For the American Farmer.

"NEVER BORROW, AND SELDOM LEND YOUR AGRICULTURAL IMPLEMENTS."

Notwithstanding the sarcasm of "Z." I still hold the above rule to be an excellent one with farmers. I am supported in my view by every agriculturist who has ever attempted to lay down sound rules for the government of their fellow-farmers. Every rule has its exception, and so has the one that heads this article. We all *sometimes* must ask assistance of our neighbors, and of course feel obliged to reciprocate similar civilities. But the practice of *lending* is a bad one, for it is inconvenient and ruinous. There is no man who can keep his farming implements in order if they are the common property of the neighbors. He grinds his axe today, tomorrow Tom borrows it, and returns it just in time to be resharpened for neighbor Jack, who "wants it in a hurry." Mr. "Z." buys a "*wheat fan*," and feels bound to lend, *because* "it is sweet to give," and it takes the rounds among his neighbours, and after a dozen removals from house to house, having cleaned 2000 bushels of grain, it is brought back to him in a mutilated condition—How pleasant are his reflections upon viewing it!! I hear him *now* repeating the lesson of "childhood," "it is more blessed to give than to receive, hoping for *nothing* again," as he sees his once beautiful fanning mill, all shattered and useless, returned upon his hands. This is no uncommon occurrence, for it happened the last year to a friend of mine who is a neat manager, but cheerfully *lends* his implements. And thus I could go on with the whole list of instruments used in farming, and show the frightful effects of being too kind in that line of business—It is right to be *charitable*, for "he who giveth to the poor lendeth to the Lord;" but cannot Mr. "Z." see a difference between *giving* and *lending*? There are many articles on a farm I had rather *give* to a poor neighbor, than *lend* to a rich, careless one. Another objection to lending is the trouble one is often put to in not having the article at home when he wants to use it himself. This sometimes is a very serious inconvenience, and work that should *then* be done is left *undone*, and may not be done at all, because, the proper time for doing it had past.

As to *borrowing*, I am sure no sensible man will want an *argument* to establish the truth of the proposition, that it is *best never to borrow*. At least I shall not trouble your readers with argument and elucidation in support of what is self-evident.

One word to "Z." and I have done. I expect that he is more nearly connected with the "*Centre-draught Plow*" than he would have his readers to know. I wonder if he did not "by request" have the "*trial of the Centre-draught Plow*" inserted just after his article.* It was with no spirit of enmity to other plows that I said the "Maryland Plow" was the best plow I had ever seen for *our* purposes, and best suited to our circumstances, where we are not all like "Z." our "own *overseer*," for I am not myself, and never mean to be with the blessing of God, and the help of the laws by which I can retain my slaves, which (*en passant*) I mean to hold on to as long as I can in spite of the mistaken philanthropy of the emancipationist, and the villainous designs of the abolitionist. That practical and vigorous writer, "*Cincinnatus*" concurs in opinion with me. Thus I am not single-minded I stated what I knew to be *facts*, they were susceptible of *proof*. "Z." could not deny them, except that *he had never seen the like*, and he therefore concludes because *he* had always seen *his* favorite plow work well, it never could have done bad work—He must be a remarkable man if there be not many things in this world which never was "dreamed of in *his* philosophy." Finding that he could not deny all I had said in praise of the Sinclair & Co's. Maryland plow, he seems afraid it will rival his Centre-draught plow, and deems it best to render the author of the article unpopular by holding up his want of *generosity* to his neighbors, and by striking at the "Patuxent Planter" he may indirectly injure the Maryland Plow. Now, Mr. Editor, you know that I am only what I call myself, a plain "Patuxent Planter," wholly disconnected with Sinclair & Co. and having no motive but my fellow-planters' welfare in view when I recommended that plow;—and as to my charity and kindness of heart, I shall say nothing, leaving others to speak of it, for like "Z." I was taught some lessons in boyhood, and have read some in the "scripture," by which I learned that one ought not to *boast* of his goodness, his generosity, but rather let not one hand know what the *other* doeth in good works, for *pure* "charity vaunteth not itself." So good bye Mr. 'Z'.

Your fellow-farmer, PATUXENT PLANTER.

[*It is proper to remark, that the arrangement of the articles was made by the printer, to bring them under the caption of "Agricultural Implements."—PRINTER.]

For the American Farmer.

SMUT IN WHEAT.

Avon Dale, P. O. Westminster, Carroll Co., Md.

Hon. Wm. Carmichael,—SIR:—In No. 3 American Farmer, I have seen your method for getting rid of smut in wheat. The interest I take in every thing relating to agriculture (having been a farmer for upwards of forty years,) will I am sure be sufficient apology for a letter from an entire stranger. In this section of the country, formerly part of Frederick County, the farmers were much annoyed by this pest, and the millers found great difficulty to make their flour pass inspection. The duty is now made easier to both occupations. Some three or four years since, our yankee friends sent among our millers, what they called a smut machine, and which is now made use of by farmers where smut exists in their seed grain, to get rid of this dusky colored enemy. It answers the purpose admirably, and the millers are enabled to improve the standard of their flour. No mill should be without one. The cost is trifling, compared to the beneficial results. When first introduced they cost about $150, I am told they can be had now at a lower price. I presume it can be put up to work as well by horse as water power, and will occupy but a small space on a barn floor. (that is to say on our *dutch barn floors*.) In mills they stand perpendicular; no doubt they can be put to work horizontally to suit the horse power of threshing machines, or to work on the hopper of the wheat fan. They will clean 1, 2 or 3 hundred bushels per day, according to circumstances; and the labour of taking to and from mill is less than washing and dredging the grain. I am speaking, however, now of our section of the country, where mills are abundant. I think they are not quite as much so in yours. I have frequently tried washing my grain and found it exceedingly troublesome. There is one of those machines in the mill on my farm and the labor and trouble of washing is done away. Mr. G. W. Ricks, who has been residing in Westminster for some time,

first brought them from the Eastward about 2 years since. He has been latterly, I am informed, on your shore, attending to the introduction among your farmers of some agricultural implement. I have no doubt he can get his eastern friends to alter them so as to suit the barn-floor as well as the mill, and I strongly recommend their use. Now sir, tho' I am aware my letter is *unconscionably long* and tiresome, I cannot resist the desire to gain every possible information respecting this detestable smut. Permit me, then, to ask you, and through you, all other farmers, what is the smut? From its shape can it be said whether it ever was of the wheat *genus?* If so, it must have become diseased in some way and never matured. Break a grain and you will find it black dust—Have you or any of your acquaintance ever had curiosity enough to try whether it will vegetate? If it will not vegetate, why the alarm about it; if it does, it is the duty of every farmer to get rid of it,—and inform his neighbor of the method. But though I have done whatever suggested itself to me, or was suggested by others, to clean my wheat from it, yet, it appears to me (at this time) that it may as well be said, wheat enveloped in plaster of Paris, Lime, or Guano, will produce those substances, as that smut will be produced by those unvegetative (if not legitimate) blasted grains. If it was wheat, it has lost its kind, by having become blasted, as also its life.

You will please pardon the prolixity of this epistle; my object is to solicit information.

P. S.—Permit me to suggest the brine of Salt-petre, in place of Glauber salts; our farmers at planting make use of it for their corn; it is said to change the color (at any rate) of the plant, perhaps makes it stronger and more fruitful.

PRINCIPIO, CECIL COUNTY, MD.

To the Editor of the American Farmer:

SIR—As our section of Maryland has not had much notice taken of it in an agricultural point of view, I have thought a short notice of the rapid improvement made and now making, along the valley of Principio Creek, and an account of some crops that were made last season, would not be unacceptable in the columns of the "American Farmer."

Principio Creek, as you are probably aware, disembogues into the Chesapeake bay two miles east of the depot of the Philadelphia and Baltimore rail road on the Susquehanna river, in Cecil county, and for the first 3 or 4 miles from its mouth, it passes through a ridge of chesnut land, usually called the Barrens; after which it opens into a fertile and beautiful country, which bids fair in the course of a few years, to be the *El Dorado* of Cecil county; the land is rolling, and peculiarly susceptible of improvement. Lime can be procured at Port Deposite at 12½ cts. per bushel, and Marl of excellent quality and inexhaustable in quantity, has been found on the land of Col. Stiles, whose beautiful farm lies on the banks of this stream. It is remarkably healthy, and the finest water in the world; and it was a familiar saying, in old times, before science spread her lucid ray among us, that there were three persons ran away where there was one death in the neighborhood. Fifteen years ago there was not as much grain raised as was necessary for home consumption. At present there is a very large surplus—Wheat and Corn are the staple crops, and the astonishing effects of guano, which is being used extensively this fall for wheat, will no doubt add largely to the general amount of product at the next harvest. An old citizen of yours, Mr. Wm. M. Mask, purchased a farm a year or two since in the neighborhood, and has made very creditable improvements on his land; he informed me a few days ago, that last year he prepared about one-third of an acre of old field by ploughing and harrowing it well; he then spread 5 bushels of ground bones, and no other manure on it. On the 1st of July he sowed half a peck of buckwheat and half a pound of turnip seed. At maturity the crop was taken off and carefully measured—he had 35 bushels of clean buckwheat, and 100 bushels of fine turnips This is not easily beaten, and the credibility of the persons who saw it measured, removes the possibility of any mistake in the amount produced. I may hereafter give you another sketch of our valley. Sincerely yours, CECIL.

AN AGRICULTURAL TOUR.

BALTIMORE, 3d Sept. 1845.

To the Editor of the American Farmer:

DEAR SIR—Enjoying the pleasure of a visit to your city for the first time, I avail myself of the opportunity thus offered of giving the readers of the "Farmer" some account of the growing crops, and the prospects of the farmer, so far as I have been enabled to get information on that interesting subject, in a journey of four thousand miles. I had two objects in view on taking my present trip: I had long desired to see something of the country where I was born, and to witness the manner of cultivating the soil in different portions of the United States—hence my trip the present summer has been an agricultural one, so far as it has been in my power to make it so by observation, and mixing with the cultivators of the soil, and with the editors of agricultural papers.

I must here say, that the *American Farmer* is endeared to me; it was that valuable pioneer in agriculture twenty years past, that first turned my mind to the importance of the study of agriculture; and altho' the size of the paper and the editor has changed, still the name is familiar to me. I am at present a subscriber to four agricultural papers, all of which I highly value. Indeed I would be at a complete loss without those valuable journals, and when I get the four papers for four dollars, I consider it by far the best investment I make in my farming operations.

We left the beautiful town of Eufaula, Alabama, the place of my residence, on the 4th of June—the spring had not been favorable, and at the time I left home we were suffering under a severe drought that was general through the states of Alabama and Georgia, as well as South Carolina. From letters received from time to time up to the 18th July, I am sorry to have to say that this severe and unparalleled drought has continued, and the result is, that there will be the greatest scarcity of corn throughout the states of Georgia and South Carolina, and in portions of Alabama; and from the best information I can get, the Cotton crop will be cut off one half. In other portions of our country, the rains have fallen in abundance, and the provision crop is excellent. I spent the month of July in the state of Illinois—here I found not only extensive bodies of the richest soil, but the country flooded with rain, and the Wheat and Corn crops most excellent—this I understood to be also the case in Indiana and Michigan. Visiting the far West for the first time, I was delighted with the extensive bodies of the richest lands which I beheld. I travelled from Evansville, Indiana, by the way of Vincennes to Chicago, over one continued body of the finest black soil; and when the time arrives

that those rich lands of the West become highly cultivated, they will become the granary of the West. That portion of the state of New York I passed over, appeared generally to be in a high state of cultivation. Indeed the farms in the Genesee valley presented to me more beauty and elegance of arrangement than any which I have seen in my entire trip.

I examined several large Nurseries of Fruit and Ornamental Trees, which gave evidence of much industry and attention to that important branch of husbandry. I found Mr. Curtis, of Edgar county, Illinois, Mr. Mackintosh, of Cleveland, Ohio, and Mr. Bryant, of Buffalo, engaged in the cultivation and rearing of Fruit Trees to a considerable extent. I trust these gentlemen, by their praiseworthy exertions, will not only find it profitable, but render their country essential service. I cannot omit to mention a visit I had the pleasure of making to Flushing, L. Island, having received through Mr. A. B. Allen, the talented editor of the American Agriculturist, an introduction to Mr. Samuel Parsons, of Long Island. Mr. Parsons invited me to visit his Nursery and Farm; availing myself of his kind invitation, we in company with Mr. E. Young and lady, and Mrs. M'Donald, took a boat running daily from the wharf at the foot of Fulton street, N. Y. for Flushing, and reached there at eleven o'clock, and were soon at the mansion of Mr. Parsons, who met us and insisted we should remain through the day, and spend the night with him; but finding our arrangements were to return in the boat in the evening, he immediately ordered his horse and carriage, and took us through his extensive Nursery of fruit and ornamental trees, embracing some thirty acres. He then took us to Dr. Valk's Garden and Vinery, which we found in a high state of cultivation; he then drove us through the neighborhood, showing us many fine farms, with their aged stone fences, presenting rather a novel appearance to an Alabama farmer. I found the valuable farm owned by Mr. Parsons, of 260 acres, had been in his family for 200 years! that it had descended from father to son, from generation to generation, until it had fallen into the hands of the present hospitable and gentlemanly proprietor.

I trust, my dear sir, that your exertions to advance the interests of agriculture in our common country, will meet with that encouragement its importance so loudly calls for, and that your valuable agricultural journal will find its way into the family of at least twenty thousand farmers, who will find the dollar paid for the *American Farmer*, the best investment they can probably make in promoting their interest. At all events, twenty years experience in agricultural papers, has convinced me that I lay out no money so profitably as a farmer, as that given for agricultural papers. Should I be spared to reach home, I will give you the plan of conducting my own farm.

With the greatest respect, yours,

ALEXANDER M'DONALD.

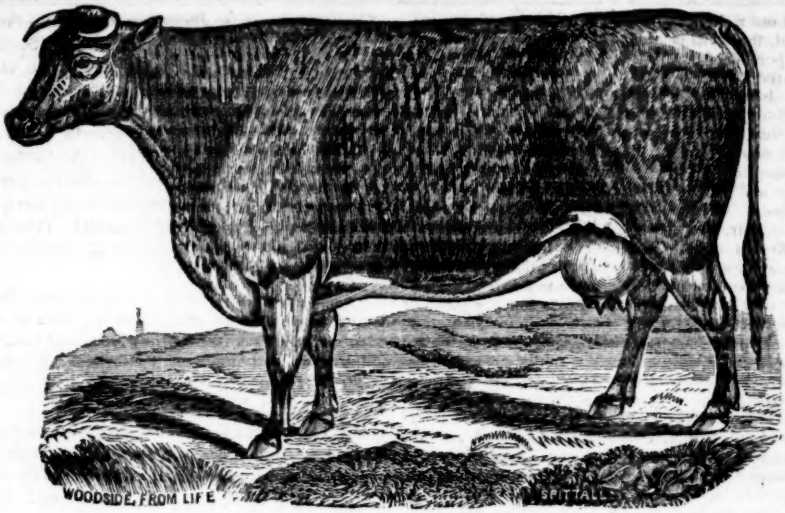
[We had the pleasure of a visit from Col. M'Donald, whilst in this city, and the favorable impressions which we had entertained of his zeal and devotion to the cause of agriculture, from the accounts we had received of him, were fully realized by the personal intercourse which we had with him—and we are gratified at the promise he has made above, to give us "the plan of conducting his own farm," satisfied as we are, that the details of the operations of a planter whose skill in bringing his crop to that perfection, which enabled him to realize *nearly double* the price obtained by his neighbors, cannot but be highly interesting to our Southern readers.]

CASTOR OIL MANUFACTURED IN GEORGIA.—Professor Means, in a letter to the editors of the Southern Medical and Surgical Journal, states that in consequence of the depressed price of cotton, Mr. J. Willis, of Troup co. Geo. has abandoned its cultivation, and successfully commenced the growth of the *Ricinus Communis*, or *Palma Christi*, (the Castor Oil plant.) During the past year he manufactured about 1500 gallons, which was sold to the physicians of Columbus and the adjacent country. The quality of the oil is pronounced excellent—almost destitute of color or smell.

Mr. Willis has acted wisely, and we hope the example he has set will be generally followed, as it must be evident to all sensible minds, that the cotton culture, like that of wheat, has far exceeded the demand, and that a corrective is alone to be found in diversifying the products of the earth.

Among the articles which should attract the attention of the culturist, as new objects of enterprise worthy of consideration, are—the *Palma Christi* for *Castor Oil*—the *Sun-flower* for *table* and *lamp-oil*—and *Madder* and *Indigo* for *dye-stuffs*. By diverting portions of the lands now cultivated in cotton to these articles, the product of the latter could be reduced to something like the wants of demand, whilst the culturist would find in the growing of the former ones sources of profit. *Grass husbandry*, the *growing of wool*, and the *raising of stock*, should, too, command attention, and while these matters are being attended to, the people of the South should place themselves in a position to manufacture their own cotton goods, and not depend upon their Northern brethren for their supplies. They have the raw material and the hands upon the spot, and we cannot conceive how it is, that the enterprise is wanting to avail themselves of such advantages, especially as there is ample water power at command to propel the machinery. A factory with 20,000 spindles would give employment to 2000 individuals, and thus create a home market for the supplies of that number of individuals, to the great advantage of the neighborhood in which such an establishment might be located.

AMERICAN POULTERER'S COMPANION.—Have you bought Bement's work on Poultry, bearing the above title? If you have not, do so forthwith, for in it there are a thousand things connected with the subject of raising poultry that you ought to know. The cuts in it are worth more than the price of the book, as they will make one familiar with nearly all the domestic fowls, as well as with many of the wild ones. His contrivances for feeding and watering the feathered tribes, his views of poultry-houses and their *fixings*; his modes of fattening, and the cure of diseases peculiar to young fowls, are all matters of deep interest to farmers' wives and daughters—therefore, we say, buy the book, as you cannot make a better investment of your money.



PORTRAIT OF "DAIRY MAID,"

THE PROPERTY OF JAS. GOWEN, Esq. OF MOUNT AIRY, NEAR PHILADELPHIA.

Dairy Maid, roan, calved 1835, by Harlsey, 2091; (Harlsey's dam by Pilot, 496) by Rob Roy, 557, e by Remus, a son of Comet, 155; dam, Lady Jane, by Comet, 155, (sold for 1000 guineas,) g. dam Cleasley Lady by a son of Favorite, 252; gr. g. dam Lucinda by Mr. Hutton's Bull of Manske; gr. gr. g. dam Lucy by Barningham, 56. She was imported from England in the fall of 1837, then 3 years old, as per pedigree furnished by J. Whitaker, esq. of Burley, near Otley, Yorkshire, by whom she was bred.

Dairy Maid, after suckling her calf three months, yielded in one week 225½ quarts of strained milk, being on an average 32 quarts per day. The next summer, after suckling another calf 3 months, she yielded in one week 235½ quarts, being more than 33½ quarts per day.

MR. GOWEN'S LETTER TO GEN. RICHARDSON.

We fulfil the promise made in our last, in publishing the annexed letter from Jas. Gowen, esq. of Philadelphia, to Gen. W. H. Richardson, of Richmond, Va. We have already noted the causes which have produced this letter, and have published the "Reports" alluded to in it, in our former numbers—and will content ourself at present with the following remarks, which we find accompanying the letter as originally published in the Richmond Compiler:

"Mr. G. is an intelligent and generous hearted Irishman. He has done much service in the country, not only by the fine example he has afforded to the farmers, but by helping to improve the breed of cattle and hogs. His public sales of blooded stock attract attention at a great distance, for his animals are of the finest kinds and purest bloods. In a letter relative to the publication of his paper, he says: "It was written with a singleness of purpose,—that of being useful. I have ever cherished a regard bordering on devotion for Virginia; and as I journeyed through a part of it on going to the springs, I could not but feel a deep sympathy for her condition. It is true I saw perhaps the worst feature. Impressed with the feeling I wrote the article, and had I not been writhing in pain, I should have made it more indicative and striking; as it is, I trust it may be of service in helping to excite the energies of so honest, noble and patriotic a race as real Virginians. Were I twenty years younger, I would cast my lot among them, and contribute my mite to their public treasury."

The following is Mr. Gowen's letter:

ON FARMING.

DEAR SIR:—The many and various matters that have pressed upon me since you visited Mount Airy, crowded out to this moment the possibility of attending to your enquiries. The time may appear long since the subject was left with me, but you will recollect, however, that I was to answer at my leisure. I advert to this merely to show that I cannot be accused of either forgetting or neglecting you, and may add, that in turning to you even now, I may be accused by others, having previous claims, as having overlooked them. Be this as it may, or however situated, I feel a strong desire to oblige you by taking up your interrogatories at once, and have only to regret that I have neither the time nor the ability to respond to them as I could wish. As to the quantity of land I farm—the crops I cultivate—the average crop per acre, the stock I keep and have fed—I must refer you to my Report to the Committee on Farms, as published in the June No. of "the Farmer's Cabinet" of the present year; likewise to my Reports to the Committee on crops for 1842, '43, and '44, also published in the Cabinet; which will afford you a tolerable idea of my practice and success.

I take up then, your list of enquiries, where you remark that I have said "a farmer cannot grow wheat at one dollar per bushel, and that he would

find it more profitable to graze and breed cattle," and where you add "how would I carry out this system?" Before replying, I must premise that my remark did not embrace all farmers; it was only applicable to farmers situated pretty much as I am as to climate, soil, and market. Where land and wages are high, much should be taken from the land to cover expenses—that is, by an improved culture, the land should be made to yield double or treble the product it does under the careless or common system. The new States, with their cheap lands and rich soils, can grow grain much cheaper than we can, and every year their facilities to market will be increasing, and their competition rendered thereby the more formidable. Where wheat lands are worth no more than from 5 to 10 dollars per acre, and of such exceeding richness in soil as to require no manure; where, in many places, as I am informed, they husband no manure, but burn even their straw; I am not surprised that they can grow wheat at fifty cents per bushel—but where land costs from fifty to one hundred dollars per acre, and of a quality that requires much care and manure, it is my opinion that wheat at one dollar per bushel will not pay the husbandman a fair compensation for his capital and labor, in view of contingencies of failure in the crop from rust, fly, &c. While I make this remark, I must not be understood as forbidding entirely the culture of wheat among such farmers as I have pointed at: I intend no more than to suggest, that wheat being made so generally a staple of their farms, is an oversight, and must prove unprofitable in the main, should the article be nominally about one dollar per bushel. Some farms are better adapted to grain than others—those, so good for grain should, to some extent, be sown with wheat; others not so good, may at times, under certain circumstances, be made to yield wheat. I would even have the cotton-planters of Mississippi to grow wheat—to raise at least as much as they consume; and so of corn, cattle, and hogs. To say that they can get their wheat, corn, beef, and pork cheaper from Ohio, than they can raise them, is an admission not very creditable to their management. It is one thing to think of rivalling Ohio in the production of these commodities, for export, and another thing to be independent of her for a home supply. Hence there is no particular practice I could recommend, that would prove advantageous or applicable to all: I can only suggest more attention to raising and feeding cattle. Some, according to the condition and situation of their farms, as breeders, both for the dairy and the stall; others, while keeping dairy, may breed occasionally from fine stock; the choice animals raised, paying them well for their time and trouble. These branches of husbandry, adopted exclusively, or in part, as circumstances may justify, and carried out with skill and spirit, would soon change the character of our farming from the monotony of the dull and stupid practice of merely sowing and reaping grain, to a varied and interesting pursuit, as animated, as it would be enlightened and profitable.

Suppose a man in the possession of some 100 to 150 acres of tolerably good land in the neighborhood of Richmond, how shall he make that land support his family comfortably? Not I am sure, by sowing some 20 or 30 acres of wheat to reap about 15 bushels to the acre—30 or 40 acres of corn at 40 bushels to the acre—rye and oats in proportion, and the keeping of 10 to 12 head of ill favored cattle—had he to pay a rent of but $200 a year, he could not pay it, under such a practice. Well, then, suppose the same farm as fit to raise wheat, &c., as above, should be put under a different practice—say begin with some 12 or 20 head of grade or improved cattle, and a thorough bred young bull—if the capital be small, the cattle can be selected of the finest of the native breeds—choosing them for their fine forms, the property of milk, and easy feeding—the young thorough bred Durham bull is held to be indispensable; his calves will be at least half blooded. Every fine heifer calf should be raised, the bulls sold. If grazing were intended, the bull calves of even half blood should be kept for steers; but I contemplate this farm as considerably dairy, a little truck or horticultural, &c. In two or three years the bull should be changed for another young full blooded Durham: this new bull and the heifers of the former bull will produce an improved stock; and in two or three years more another change of bull, will bring a stock of cattle, if care shall have been taken, that will be worth a considerable sum of money. In all this time they will have cost nothing more than the same number of inferior cattle would have cost; while the sales made of those that can be spared, and the intrinsic value of those on hand, would, under a fair valuation, amount to a sum that would surprise many: and this result is produced at the trifling sum found betwixt the price of a yearling Durham bull calf and a common one. So much for the cattle on this farm. But it may be objected, there are too many cattle on so small a farm; but that this is not the case, I shall attempt to show, and offer my practice as reported, in proof. The increase in manure from such a stock, if properly husbanded and applied, will increase the crop of grass, corn, &c. three-fold. It would occupy too much time to give even a sketch of what the Root crops have done for England, Ireland and Scotland. Why, then, cannot we attempt this culture on a small scale in this country—in Virginia, if you please? Turnips there will grow well as a fall crop, and it strikes me that the sugar beet could be raised also, as a spring crop, to advantage. The cooling manure of the cow stable, mixed with muck, scrapings of the yard, with sprinklings of gypsum, and light dressings of lime, would produce good crops of these roots and ruta baga. If this be so, who then can fear to be overstocked with 20 to 30 head of cattle, on a farm of 100 acres arable land? Four or five acres devoted to this culture would produce as much winter provender for cattle as some 20 could do in the ordinary way. Then for summer, red clover and orchard grass, lucerne and corn, sown broad cast, cut green, and fed to the cattle, will be found to be equally profitable, and save much land for hay, grain, corn and oats.—Under good management, with such a stock, in such a climate as Virginia, the land should be made to yield 60 bushels of corn to the acre; thirty to forty of wheat, in the absence of fly and rust; and of rye and oats and hay in proportion—by good management, I mean in the main, deep ploughing, judicious manuring, and careful seeding. The hay and corn fodder should be carefully secured for winter; and if there could be kept a simple steaming apparatus, to steam the corn stalks, with the roots, it would be a great saving. The milk and butter that in a few years might be sold, together with the cattle that could be spared, ought to produce a pretty round sum. If to these be added the produce of a well cultivated vegetable patch, and the market wagon kept regularly going with the milk and butter, fruits and vegetables, to the city, there would be no doubt of success. But who among you

will put to his hand first, and demonstrate this practically?

Those who live at a distance from a market, and have large farms, should turn their attention principally to breeding and grazing; they should not separate these two branches. It is but too common for the grazier to depend upon the drover for his supply of cattle; in that way he can never be assured of the good feeding properties of the young cattle he purchases; better by far to select a good bull, the character of whose breed he can depend upon for easy feeding and early maturing, and progress steadily and patiently for a few years, and in that time he will have possessed himself of a breed that will show good proof of his attention and skill. I am persuaded that the improved Durham steers, under proper management, can be turned off regularly at four years old to weigh from 9 to 10 cwt. If this be so, and I have not a doubt of it, what a saving in time and feed is here—9 to 10 cwt of fine beef in four years, against 5 or 6 cwt. of the hard feeding tribe in 6 to 7 years. It appeared strange to me, as passing through several farming districts, to see much devotedness to raising grain, to the almost utter neglect of cattle. As far as the eye could reach from the road, nothing could be seen but grain, with here and there a cornfield; while a few stunted cattle and sheep might be seen running along the road-sides, excluded from the fields, till they and the swine should have a harvest feast in the stubble-field. (I speak now of some parts of Maryland and Pennsylvania.) How short-sighted to neglect the cattle, or to keep such a breed! not one in a hundred of them could, by any force of feeding, be made to weigh 6 cwt., or could be put in a condition, from the time it was taken up, at an expense short of the whole value of the animal when he came to be slaughtered. When I have spoken of this ill-judged policy, I have as often been met with the assertion, that those farmers knew what they were about, and made more money at farming than I did: but this making meant no more than that they saved more money, by expending less upon themselves and families than I did; for *I deny that they can make more by farming than I can, upon a like quantity of land, so far as the products or yield in crops and cattle are concerned.* If some of the farmers alluded to were to be charged with their own labor, and that of their sons and daughters, at such rates as they should be entitled to in another's employ, I would not hesitate to enter the lists with the best of them. But, if they and their children do all or most of the work, and, by denying themselves many of the comforts of life, lay up some money, does it prove that their system of farming is the best? Certainly not. If they could be prevailed upon to improve their practice, it would tend to lighten their load of toil—afford without impairing their income, some relaxation of the drudgery to which they and their children are doomed—and enable them to avail themselves of the education, furnished by their own involuntary contributions, under the school law:—it would redound immeasurably to their posterity, and elevate their children to that rank in society, which of right is their legitimate prerogative. It is lamentable to think of the ascendancy lawyers, doctors, merchants, and manufacturers have acquired over the more numerous and wealthier class—the farmers; who seem content to drudge on, unmindful of their position, and the burdens imposed upon them by the nobles (par excellence,) and that distinguished class, the professional politicians! Such is the false position of classes; and so will it be, until the farmers rid themselves of the trammels in which faction has so artfully involved them, in the name of the party, and qualify their sons to participate in the Government, proportionably to their means and numbers. Let me not, however, be understood as condemning industry and economy: I mean nothing more than that the hardest toil and the most rigid economy should not be received as evidence of good farming. I am an advocate for industry. No business can ever prosper unless it be carried on with spirit and constancy; nor can the most profitable returns make rich or independent, without the rational and commendable prudence which teaches us to limit our expenses within the line of our income. The extremes, extravagance and penuriousness, should be avoided by all; and by none more than the farmer. His prudence and sense of propriety can in no way be more fully tested than in that of bringing up his children. To reduce his offspring to the condition of slaves, or to bring them up in idleness, is alike censurable—so much so, that it were difficult to draw the line, and show which had the advantage; when, as let it be supposed, that the common drudge and the genteel idler inherit each a valuable estate. The youth trained up in idleness and folly, and the uneducated who, from childhood, has been bound to drudgery and incessant toil, (being now in possession)—which has the advantage? Why, the idle and fashionable sprig of mock-nobility will have the shortest race; his lands will soon pass to others, while his stupid contemporary will *hold*, not *live*, upon his all the days of his life; but then to think of such an existence, without one ray of intellectual enjoyment to brighten or change its gloomy and stagnant monotony!

To the question whether I think it profitable to raise hogs, either for market or domestic consumption, and what breed do I consider best? I answer, that on such a farm as is under view, it would not be profitable to raise hogs for market, that is, for fatting to sell on foot or be slaughtered; while with a good breed of hogs, and under circumstances of superabundance of food, such as clover, roots, waste vegetables, large crop of corn, a few might occasionally be fed over and above the necessary supply for family use; in like manner, sometimes it might be proper to fatten one or more steers; while in the main, it would be more profitable to buy of the grazier or lay in a supply of beef from the butcher. These are matters that will depend solely upon circumstances, and must be governed by them; but as a general rule, the farmer should endeavor to produce whatever he may require for the comfort and support of his family, and avoid the laying out of money for things which it were in his power to have produced himself. The raising of hogs for family consumption is *indispensable*; upon such a farm there will, of course, be considerable waste or refuse victuals, which would be lost were it not for the hogs; then so far as this quantity of feed is concerned, there is a clear gain, and he must be a poor farmer indeed who cannot make his hogs pay for the extraneous supply they will require over and above the portion which has cost nothing; then the satisfaction to know that his bacon, hams and lard are all of healthy, well fed animals, and of his own raising.

Two or three sows, and one choice boar, of a distinct family, should be constantly kept, and well taken care of. It is a great waste of time, and often vexatious to the farmer, to be compelled every spring or fall to look out for pigs to stock his pens, running the risk of getting animals that will empty the corn

crib without filling themselves. Far better to raise pigs from a boar and sow known as easy feeders; and should there be too many to keep over, there is no neighborhood in which those that can be spared will not find a ready sale, if the breed be an acknowledged one; to say nothing of the satisfaction of having it in one's power to promote the interests of his neighbor by supplying him with a boar or sow pig to improve his stock.

The best breed of swine that has come under my notice is the English Hampshire, especially the sows for breeding. A real Hampshire sow, after producing three or four litters, may be made, with all ease, to weigh 5 cwt. when slaughtered. The Chester county hog, so called, seems an indifferent specimen of the true Hampshire. The next best for boars is the Lincolnshire; for compactness they are almost equal to the pure Berkshires, whilst they excel them in size: but of the Hampshires and Lincolns there are few to be found of the genuine breed. The improved Berkshire is, for easy feeding and compactness, equal to any specimen of the swine kind ever produced; but they are sadly injured by the injudicious breeding and the imposition of dealers, who sometimes have sold any thing that was black or spotted, in the shape of a hog, as Berkshire. The objection some bring against the Berkshire, especially the sow, for breeding, is their want of size. The sow for breeding should, it is true, have great length and depth of carcass; but for fatting, this objection is of little consequence, for the want of size can easily be provided for by increasing the number. If twelve Berkshires, in twelve months, with the same amount of feed, will weigh as much as ten of other breeds, which consume as much as the twelve, the difference in handling twelve instead of ten is hardly worth noticing. There are other breeds, but from careless breeding, there can hardly be a distinction or difference pointed out among them: so will it soon be, I fear, with those distinct breeds already referred to, from the general carelessness that pervades American husbandry. At first a high price is given for a pair of pigs, from some crack breeder; these, very injudiciously, are from the same boar and sow; and thus, at the very start, a fatal error is committed, in the affinity of the young pair which have been purchased to breed from; and this system is possibly continued for years, with their produce, until the heads of the animals become as large as their bodies. There is no animal on the farm that will so soon degenerate from breeding "in and in," as it is called, as the hog.

There is another grand mistake in the management of hogs, which I am bound to notice—that of turning them out to graze, as if they were sheep or goats. I do not class as farmers coming under censure those who provide no stables or sheds for cattle, nor barns for hay or grain. To such admonition or advice would be useless as to the necessity of pens for swine. The ass, the goat, the buffalo and wild boar, have the characteristics of the stock adapted to their practice. But to those who have large barns, comfortable stables, sheds and pens, I would take leave to point out the folly of turning out their hogs to graze with the cattle during the fall. The hog loves ease, and he should be indulged; keep him clean, give him suitable food, without putting him to the trouble to range for it, and he will doze and grow fat, and be tender; turn him out in the field to seek his food, and you make him wild, sinewy and tough, and hard to fatten after he is taken up. It is to this cause that the Bacon, in many instances, is so coarse and disagreeable. When I have witnessed the hogs feeding with the cows, and the eight rail fences, with the massive posts, to keep hogs *in* and *out*, I have been astonished; for it struck me that the expense in maintaining the four extra rails, with the extra size and boring the posts, would make a considerable item in the expense towards fatting the hogs in pens, to say nothing of the injury done to the pasture, and the danger of slinking in the cows, and young heifers, with calf, from the offensive effluvia of the droppings of hogs.

I must come to a conclusion; time will not permit me to go more into detail; the reports referred to in the "Farmer's Cabinet," will make up for many of the deficiencies in this paper; and above all, I rely on your own good sense in adopting and carrying out the best practice under existing circumstances.

I rejoice to find that you, and many other intelligent men, are putting your hands to the plough—then by every proud and patriotic consideration, do not look back. Think of what Virginia was, and what she now is, and what should be her purpose. Is there a son of the Old Dominion who can be so recreant as to abandon her soil—the land of his spirited and hospitable ancestors? No!—perish the thought! Roll up your sleeves, then—devote yourselves to the noble and ennobling pursuit of agriculture—resuscitate your lands! Be not ashamed to dig, and you will never have to beg or borrow. Let your lands no longer reproach you for neglecting them. Then will health, plenty and prosperity shine upon you, and old Virginia be again, as she ever was, the boast of hospitality and the flower of chivalry.

JAMES GOWEN.

Gen. Wm. H. Richardson.

THE AMERICAN FARMER.

BALTIMORE, OCTOBER, 1845.

The American Shepherd, by *L. A. Morrell*—A very neatly executed volume of 437 8vo. pages, with the above title, has just issued from the press of *Harper & Brothers, New York*—As its title imports, it is by *L. A. Morrell*,—an extensive sheep breeder, of Tompkins co. N. Y.—a gentleman eminently qualified by his education, his pursuits, and his research, to make just such a book as is required by American flockmasters; and it is but meting out even-handed justice to him to say, that, great as were the expectations of those who knew him, and had an opportunity of judging of his capabilities, he has more than realized every expectation formed of his talents, his experience, his industry, his powers of arrangement, and analysis. In a word, he has succeeded in making a book whose intrinsic merits entitle it to a place in every farmer's library—on every shepherd's shelf. In his preface, the author says, that he has been a practical manager of sheep for many years—a vocation to which he is enthusiastically attached—he acknowledges an affection for the sheep paramount to that of any other domestic animal, and has studied its instincts and habits at all seasons and under all circumstances; that he now, and always have *shared with his laborers* in every department connected with their management. What, therefore, is offered on this subject, is the result almost solely of what his own eyes have seen, and hands handled—is nearly a transcript of his system of practice. These declarations were superfluous; for the book which Mr. *Morrell* has produced, bears on its every page the impress of a master-hand—the evidence that he who gave it shape, and form, and pressure, was familiar with every detail, and intimate with all the mysteries involved in the duties of the shepherd; for none other than a practiced flock-master could so completely have covered all the ground. There is not a point connected with the management of the sheep in health, and in sickness—its feeding and treatment, in summer and in winter, that he has not discussed with ability.

The author says that his object was to bring before the public "*a strong work*"—and most triumphantly has he done so. It is, indeed, a work which will be a standard one in sheep-husbandry long after he shall have passed from off this busy coil of life

As we shall recur to this work again and again, we shall close our present notice by calling upon every agriculturist who desires to be possessed of the ablest work on the interesting subject of Sheep-management, to forthwith buy *"Morrell's American Shepherd."* It is for sale by *Cushing & Brothers*, Baltimore st. opposite Hanover, Baltimore.

THE FARMER'S LIBRARY—We have received the numbers of this work which have been issued, and cannot in too strong terms, commend it to the attention of the agriculturists of the Union, for verily no Library should be without it.

The last No. contains the commencement of *Thaer's* great work on the *principles of Agriculture*—an *introduction* by the American editor, a *Memoir* of Thaer, besides a vast number of other articles of sterling value, and striking interest to every agricultural reader. The embellishments consist of a beautiful illustration of the *Cotton Plant*, and a portrait of the short-horn bull *Buchan Hero*, the property of Sir Chas. Tempest.

The *Farmer's Library* is a monthly journal, devoted to Agricultural and Horticultural pursuits, and the name of its editor is a surety that it will be conducted upon liberal principles, and with the first order of talents. The price is $5 per ann. each number containing 112 pages; and as it is the intention of the editor to republish in its pages standard works upon the science of Agriculture, the possession of such works cannot be had in any other way upon as favorable terms.

PRINCE GEORGE'S CO. (MD.) AGRICULTURAL SOCIETY, hold their 5th Annual Fair in Upper Marlborough on the 22d & 23d Oct. inst. and present a most liberal list of premiums for competition—We notice with much pleasure as an evidence of the spirit and zeal which actuate the members of this admirably managed Society, that independent of the regular premiums of the society, 20 gentlemen have voluntarily contributed $5 each, for the purpose of procuring three splendid pieces of plate, valued at $50, $30 and $20, as premiums for the first, second and third best regulated and most highly improved farms in Prince George's county. We wish we could flatter ourselves that so laudable an example would stimulate to a like praiseworthy action in other sections of the State.

BERKELEY AGR. SOCIETY—Col. Ed. Colston, Prest. of the Society, a gentleman eminently qualified by his scientific and practical knowledge, has been appointed to deliver the Annual Address before the Berkeley Society, on 4th Thursday of Oct.

POTATO DISEASE—We have sad accounts from Maine and New Brunswick in regard to this disease, which is said to prevail to a much greater extent in many sections than it did the last year, and that it has appeared earlier in the season. The Maine Farmer says that many farmers predict the total loss of their crops—the effects of the drought being added to those of the disease.

POUDRETTE COMPANY—A correspondent at Annapolis asks: "Why is not an incorporated company formed in Baltimore for manufacturing poudrette."

In reply we would remark, that the subject has been in agitation for some time, and will probably be accomplished this winter—Mr. Miner, who has the management of the Philadelphia and New York companies, has expressed his willingness to aid in the enterprise—and we think there is no reasonable doubt but that the necessary amount of stock will be readily subscribed, to effect the desired object.

DEATH FROM GUANO DUST—The London Medical Times describes the case of a farmer, who died after a few days of extreme suffering, from hemorrhage, vomiting, &c. occasioned by his accidentally getting a small quantity of guano dust into his throat.

GREAT YIELD OF BARLEY—John Bruce, esq. of Winchester, Va., reaped this season from a 4-acre lot, 210 bushels of Fall Barley, which sold for 75 cents per bushel.

GUANO ON VINES AND ORANGE TREES—Mr. Drivers of Madeira, in Feb. last, used four bags of guano on 4 acres of vines, which caused the production of four-fold the quantity of grapes produced in former years. He also tried it on orange trees, which have given nearly double the usual number, and much larger in size.

WHEAT—We have been furnished by Mr. Chas. Bishop, of Manchester, York co. Pa. with a sample of wheat, the grains of which are the largest and finest of the white variety we have ever seen. Mr. B. knows no name for this wheat—a head of it was found in a lot of a different kind introduced into his vicinity, two years ago, from which this specimen is derived. A few bushels only have been raised, the portion of which disposed of sold for $5 per bushel. Next year it will be multiplied, and those desirous of obtaining it can be supplied.

☞We have been favored by Mr. Pearson with some specimens of the wheat noticed in the annexed paragraph, and from a comparison of the stalk, head and grain, find it to be of the same variety with that left us by Mr. Bishop:

REMARKABLE WHEAT.—The Baltimore American notices a specimen of white wheat, very remarkable for its extraordinary size, which was grown on the farm of Mr. JOSEPH PEARSON, about three miles northwest of Baltimore, who has this year raised about three hundred bushels, the produce being estimated at forty-five bushels per acre. The stalks are about six feet high, very stout at the bottom, and the grain fully one half larger than the ordinary red wheat. The strength of the stalks enables it to stand the wind and rain, and it is said to be entirely exempt from smut. Several years ago Mr. Pearson purchased and sowed a quantity of wheat procured from New York, among which several heads appeared towering several feet above the other grain. These were carefully collected, producing about a gill of grain, and in a few years Mr. Pearson has succeeded in raising from them the quantity above mentioned. He supposes it to be a species of Chinese wheat, the description of which it closely resembles.

Mr. Hy. R. Smeltzer, near Middletown, Fredk. co. Md. has raised this year from 4 1-4 acres, 212 bushels and 43 pounds of wheat, which is over 50 bushels to the acre. It is called the "Oregon." The Catoctan Enterprize says the land was carefully surveyed by Geo. Bowlus, esq. and the wheat thrashed by the machine of Rev. Mr. Henny, who saw it measured—It was sowed on the 5th Oct. last, not quite 1 1-2 bushels to the acre; it is of a beautiful bright red color, and smooth chaff.

Mr. S. also raised the "China" wheat, which yielded as near as could be ascertained, about 47 bushels to the acre; this is a most beautiful white wheat, ripens early, and is said never to have been injured by the Hessian fly, mildew or smut. This and the Oregon is on sale by R. Sinclair, jr. & Co.

The Louisville Journal says that Mr. Magill Robinson, of that neighborhood, has exhibited to the editors a bundle of Red Straw Wheat, the ears of which were large and full, and the grains very plump and heavy, and it would be difficult, they say, to produce a finer specimen. It ripened last year by the 1st of June, and always escapes the rust. It weighs very heavy, and yielded Mr. R. about 25 bushels to the acre.

TOBACCO—The advices from Europe are favorable for our staple—the prices were steady in England, and a large business had been doing at improved rates on the Continent, especially in Holland and Belgium. This animation has been occasioned by the unpromising appearance of the crops in the U.S. Considerable sales were made during the month to fill orders by the steamer, at an advance of 25 cents per 100lbs. for the common sorts Maryland Tobacco—In other qualities no advance has taken place.

We continue to receive accounts of the probable shortness of the crop, but we incline to the belief that it will be owing more to the deficiency of the plants which were set out, than to the effects of the weather since.

Mr. W. P. Bowen has this season grown Tobacco near Savannah, Geo. from seed obtained from Cuba, which yielded at the rate of 800 lbs. to the acre, and the result dispels all doubt as to the practicability of producing the article in that climate, and of the best quality, that produced by Mr. B. comparing admirably as to strength, color and texture. Mr. B. has also cultivated the "low pear tree" tobacco, the seed of which was obtained from the Patent Office—It is regarded as a very superior article, and appears to be less infested with the worm than the plants grown from the Cuba seed.

☞We refer our readers to the advertisement of a sale of blooded stock, to take place on the 30th inst.

CLAIRMONT NURSERY—We had the pleasure recently of a visit in company with Col. Alex. M'Donald, and lady, of Alabama, to the Nursery of Messrs. Sinclair & Corse, near this city. Our venerable friend Sinclair, having passed his three score years and ten, the age allotted to man, and having devoted an active life to an honorable pursuit, which is calculated above most others, to confer blessings and happiness upon his fellow-man, has now, from age and infirmities, devolved the more active duties of the extensive establishment, upon his son-in-law and partner, *Mr. Wm. Corse*—and it was a gratification of no ordinary kind, that we found in that gentleman those traits of character which gave us full assurance that under his immediate guidance, the reputation which his venerable sire has for so many years been building up for "*Clairmont Nursery*," will not be impaired in his hands. To zeal, activity, intelligence, and an almost enthusiastic devotion to his business, Mr. Corse possesses a consciousness of the high responsibilities of his position, and is determined by a conscientious discharge of the trust confided to him, as well from interest, as of a sense of moral duty, to establish for his Nursery and himself, a name and character which shall make them second to none other in our wide extended land, and secure a corresponding patronage from the agricultural community. We can assure our friends at home and abroad, that there is no necessity for their travelling beyond our city to obtain the necessary means to replenish or establish their orchards, &c. as we have the testimony of our visitor, Col. M'D. for saying, that in his tour he has not seen so extensive an establishment of the kind—and has intimated to us that he will, in our next, take such notice of it as its merits deserve.

Messrs. *Sinclair & Corse* have just issued a new catalogue of *Fruit and Ornamental Trees, Shrubs and Plants*, cultivated at the *Clairmont Nurseries and Seed Garden*, with the prices attached, which they will distribute gratuitously to those wishing to obtain copies.

As we shall take occasion again to refer to this important adjunct to the trade of our city, we will only add, that we hope no one who feels an interest in *Horticultural* and *Floracultural* pursuits, will fail to pay a visit to *Clairmont*, where they will be sure to receive a cordial welcome from the hospitable proprietors, and may perhaps be favored, as we were, with a glass of the delicious Wine, of their own production, by the venerable consort of the senior proprietor, who, though his equal in years, retains like him the full vigor of intellect, and almost the buoyant elasticity of youth—the fruits of a temperate and well ordered life, for which the Society of Friends, of which they are members, are proverbial.

COTTON AND RICE—The Mobile, Ala. Price Current represents the accounts from the interior of the state as very unfavorable for the Cotton crop—and that making allowance for exaggerated statements, "enough remains to satisfy us that the receipts at this port (Mobile) during the coming season, will certainly fall short of last—probably reaching, however, an average of the last three or four years." Notwithstanding the unfavorable accounts of this crop in several of the states, the estimates in N. York are, that upwards of 300,000 bales more have been produced this year than last.

The Savannah (Geo.) Republican gives the opinion, formed from the best sources of information, that the crop of Rice in that state will be considerably short of last year, and that prices will rule correspondingly high—and that the crop in S. Carolina will show a greater falling off than that of Georgia.—The Winyah Observer says that the fears of a short crop will be fully realized, and that it is certain that there will be at least 10,000 tierces less raised in that neighborhood than usual; that in consequence of the drought, it has been the most inauspicious year for the Rice crop in the recollection of the oldest planters.

DISTRESS IN THE SOUTH—The papers in South Carolina, present us with distressing accounts of the sufferings of the poor, from the failure of the Corn crop—The Greenville Mountaineer says that hundreds are leaving the state, and the editor says he regrets the necessity of advising others to follow them. The Asheville, N. C. *Messenger* says, that numbers of wagons pass through that place daily on their way from S. Carolina to Tennessee, to procure corn, "as the crop of that article in a large portion of South Carolina is entirely destroyed. These wagons are sent from 150 to 200 miles for corn! Great numbers of poor people are leaving the state and going to Tennessee—a hundred and fifty persons, consisting entirely of poor families, passed through this place last week." The Georgia Constitutionalist says that the want of water to turn the mills is another great evil, and in some instances they have had to send 50 miles to get meal. The editor of the S. C. Temperance Advocate says he has "traversed different sections of Lexington, Newberry, Laurens, Greenville, Pickens, Anderson, Spartanburg, and Union districts, and the result is, our firm conviction, founded on close personal observation, fortified too, by the opinions of judicious men, that the crops, both of cotton and corn, will prove well nigh a total failure."

BIRDS—It is extreme bad policy to countenance or permit the havoc which is made of the spurrows and other small birds—the innumerable insects which they destroy, should render it an object with every farmer to encourage them about their orchards and fields, as for every cherry or grain of corn they appropriate to their own use, they preserve to the farmer thousands from the ravages of the caterpillar, the cutworm, &c. Then don't permit them to be molested or shot, merely for the sport of idle and inconsiderate boys.

NITRATE OF POTASH—is said to have been discovered on the coast of Africa, which has excited an interest in England similar to that of the Guano mania. The discoverers are endeavoring to keep secret the place of deposit, except to those ship-owners who agree to allow them a portion of the profits—Twenty vessels have been sent out by the parties to one adventure, and another mercantile firm is working on its own account.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND—The Mark Lane Express of July 21 has 16 columns filled with a description of the proceedings of the Royal Agricultural Society of England at Shrewsbury. The Duke of Richmond presided at the dinner. At the termination of its first year, in 1838, the members of the Society were 690 in number; its income £1,128. Its present list of members is nearly 9000, and its funded property above £9,000.

REMEDY FOR THE BLOODY MURRAIN.—Dissolve a pound of Glauber salts in three pints of hot water, as soon as cool, give the half of it in a drench: after an interval of four hours give the remainder of the salts. Then take 3 pints of molasses, and mix with it 6 ounces of pulverized charcoal; let the whole be well incorporated together; then dissolve an ounce of salt-petre in a pint of warm water, pour this into the molasses and charcoal, stir the whole well up together—divide the mixture into 4 equal parts and give one part every two hours. While the animal is under this treatment, she must be kept in a close shed or stable, and be provided with warm messes of bran, meal, and cut hay, slightly salted, to be given in moderate quantities, at the regular times of feeding. Tepid water should be given her to drink. Should the animal refuse to eat, it will be well to prepare a gruel made of equal parts of Linseed and Indian meal, to be given her in drenches, so as to counteract the exhaustion consequent upon her discharges. This gruel diet should be continued for some days.

To relieve Colic in Horses—Rub spirits of turpentine on the breast of the horse; and if he be drenched with it, he will be relieved. Horses should never be put to severe work on a full stomach; more horses are hurt by hard driving after a full feed, than by a full feed after hard driving.

From Transactions of the N. Y. State Agricul. Society—1844.

AGRICULTURE OF MISSISSIPPI.

By M. W. Phillips, Editor of the "Southwestern Farmer."

LOGAN HALL, EDWARDS' DEPOT, *August*, 1844.

Benj. P. Johnson, Corresponding Sec'y:

Dear Sir—Your request, "on behalf of the Executive Committee of the New York State Agricultural Society," shall receive my most cheerful attention.

With a climate and soil not excelled by any portion of our continent,—with every facility to rear all necessaries,—with many of the luxuries of life,—the farmers and planters in this rich valley, do, far too often, lead a miserable life in laboring to accumulate, with the sole intent of adding to their effective force, that they may make more.

I speak from facts that can be substantiated, when I affirm that we can, in this portion of Mississippi, make an average crop of six bales weighing 400 lbs. each, with corn and pork for the farm; as also, to rear cattle and sheep in sufficient abundance to give us beef, butter, milk, mutton and wool, for home consumption; and no doubt but in addition, enough horses and mules to keep up the farm stock of work animals. With this, we can produce a great variety of choice fruits, with but little attention, and make wheat and grain generally to supply all of our wants. Yet how is the fact? Almost every farmer pitches his crop so as to give the greatest possible yield of cotton, with enough corn "to make out with." In consequence, he has no time from his cotton, to devote to any thing else,—neither cotton or corn cultivated, merely kill, kill grass and weeds; he makes a little corn do,—less milk and butter,—and even less of every thing else. Content with making as many bales as his neighbours, he cares for nothing else. From these circumstances, the mere sojourner draws his conclusions unfavorable to our soil and climate, presuming that if grass would grow, and sheep would not run out, and hogs could live, that we would have more,—thereby doing an injury to this beloved country. Attribute this want to a bad system of farming,—to indifference or indolence of the farmer, and justice would be rendered to all.—Our climate is accused of being unfavorable to the production of fine wool, of fruit, corn, grass, &c. &c. —with bare credit given to it of ability to raise cotton, rice, and sweet potatoes,—which, by the bye, are the only products that are grown.

The above is mainly what now is, and what has been, but a change is coming over the spirit of our system,—much of this want of care and attention is wearing away. The farmers of Mississippi are beginning to improve, and to provide many of the comforts and luxuries of life, as well as the necessaries. I claim some allowance for my brethren; we are, comparatively, a young people; fifteen or twenty years ago, a great portion of this country was unienanted, save by wandering Indians. Therefore, improvement to any great extent, are not to be expected. The ignorance, or want of education attributed to our citizens, though true, yet as the population now here, are mostly from other States, the odium, if such, should be cast north, south, east, and west, not entirely on this State. As our country increases in age, a better culture and wiser exertions are perceptibly advancing. To give one instance of this, I will here state, that shipments of choice fruit have been made from Vicksburg to New-Orleans, this season; which business will increase so as to be reckoned in the exports of this State. Two hundred barrels were freighted at one time, on a steamer.

This State, embracing an extent of territory from 30° 30', to 35° north latitude, and from 11° to 15° of longitude west from Washington, it must be supposed that the soil, aspect of country, products for market, &c., &c., would be very various, and so they are; whilst we have some hilly country in the interior, we have some of the most broken and unique country immediately on the Mississippi river, that is seen any where. Yet for all this, as a State, the land is level. The soil is equally various; the hills of the river are rich, and are the best cotton lands in the State; whereas, the hilly lands of the interior are poor to fair quality; the level lands of the eastern portion of the State widely differ; some of that country is rich, but the larger portion are covered with pine, and much of that timber appears to be young. The level lands of the western and northern portion, are from fair to choice lands.

A portion of the eastern and upper part of the State, is well supplied with streams of water, where excellent mill seats, and water too, can be found, to carry on manufactories. This, with the healthiness of that region, will some day bring it into notice; and I might add, the vast grass range for cattle, hogs and sheep. There are here, thousands of acres,—not entered,—and not unfrequently 500 to over 2000 head of cattle belonging to one man.

Our means of production are as various as the soil, or face of country, and far more than our products indicate. Much of the east can only rear stock, and this can be done to an indefinite extent; a portion of it, and of the north, can raise wheat and stock profitably; and if those who live so remote from market, would devote their attention to stock, they would be the gainers, and their country enriched.—The west portion can, as I have before said, raise all supplies and a fair crop of cotton.

Our product of corn may not show over an average crop of twenty bushels per acre; but if no more, any farmer can make a full supply, and a fair crop of our staple. One fact is certain—many raise enough, and some large cotton growers do actually sell corn. If these do so, why those who make a less crop per hand cannot, I leave to others to account for.

In many portions of this State, the only attention that cattle, sheep and hogs require, is, a little salt and corn, to keep them gentle; and yet it is broadly asserted, and again reiterated, that there is no grass in Mississippi,—that the heat of the sun and want of rain, parches up vegetation. If this be so, how could a man, planting only some ten or twenty acres of corn, keep his 1,000 or 2,000 head of cattle, which is now done in the eastern portion of Mississippi?—How can the farmer who works only fifteen or twenty hands, and is known to make large crops of cotton too,—I ask, how can he feed 300 to 500 head of hogs, 100 to 200 head of sheep, and full 200 head of cattle, besides work horses and a few colts? Yet this is done, and the owner sells corn, also cattle, sheep, and pork. Then let it not be said that Mississippi cannot raise her necessaries, nor produce grass.—While on this subject, allow me to say, that as early as the 26th of March, I have cut a stalk of red clover here, measuring 46 inches, and had a lot of over 4 acres, that would have averaged three feet.

There is generally but little attention devoted to raising of stock of any description, but if you will cast your eye over the census as returned to the

general government, you will see that we raise some stock, and that of hogs, nearly three for every inhabitant,—which I think, like much more, is wrong,—there are more hogs in Mississippi than returns call for. Though this in the general be true, yet there are many exceptions—the high-bred racer is found here, and quite creditable; some mules; quite a number of jennets—one gentleman alone has some forty of them. We have quite a number of cattle of the improved breeds, and on the increase. Also, a large number of the various improved breeds of hogs; and sheep of the pure Bakewell, Southdown, Saxony and the native, or Spanish stock. In short, this branch of domestic economy is on vantage ground, and must continue to advance, even without any further importation, nay without even an additional attention, the improvement must spread until the old breed is changed entirely.

Here, as elsewhere, there is much contrariety of opinion as to the kinds of stock preferable; not a few of my fellow-citizens believe strongest in any breed crossed on the corn house, and that alone is improvement. I differ from this opinion, and think that although corn is an admirable cross, yet when crossed on the native breeds, it were well it be sold at 25 cents per bushel at home.

I am of opinion that the Ayrshire or Devon cattle would suit the cotton growing region much better than any other that has been introduced into the United States, for the reason that no provision is made for cattle; but if well attended to, the Durham must be the favorite. I have had no experience with Ayrshire cattle, with the others I have.

We want milk cattle, for that size which will give us milk enough will give us beef. I have in all probability brought more cattle to Mississippi, of the improved breeds, than any other person. The loss sustained was full fifty per cent, but their increase has far out-stripped the whole original number, cows giving generally a calf per year.

Of hogs, I give a decided preference to the improved Berkshire. Having tried several, and had, I might say, the most of the improved breeds under my eye, I may be permitted to say—although the white Berkshire, the Woburn & Mackay may have been either sorry specimens, or diseased—but the Berkshires with me make a hog large enough for any country; 220 to 230 lbs. at eighteen months old, on the same keep as others that only weighed 150 to 160 lbs.

That sheep husbandry is destined to exercise an important influence on Mississippi, I cannot question, and the Merino family must be our sheep. Our pasturage, when good, is too luxuriant, and when drouth of some weeks standing supervenes, it becomes scant. Our seasons of wet are uncertain—sometimes of short duration, again for a month, and "when it rains it pours." This sort of keep, and these rains will not do for the long wools, which I am satisfied of from a trial of five years. I think the middling wool Southdown would suit admirably, but it is as cheap to raise a fine fleece as the second rate one of Southdown. The Merino sheep in the South are healthy; I can place my hand on them in South Carolina, where they have been for thirty years, and if any diminution in quantity or quality of fleece, then we know nothing southerners cannot detect.

Where stock is concerned, we have an advantage over any northern country. But mind you, we have winter, such as it is, for some two or three months, often not cold enough to "save our bacon" well—we can have green food any day in the year without a plow, the erroneous statements of English journalists to the contrary notwithstanding. Admit we could have nothing but Bermuda grass and rye,—the first everybody knows grows in a drier clime than this,—and we can have grass from March till frost, and by sowing rye in corn and cotton fields, it will be fit for grazing before Bermuda is killed down. We can raise turnips, which grew within the sound of my voice, to measure thirty inches in circumference; cabbage that measured thirty-six inches clear of the green blades, a *white head* only measured. Egyptian oats make an excellent winter food; clover, if sown in September, will make excellent grazing by 1st of March. The cow pea sown in our corn fields, not injuring product of corn, will fatten our hogs and horses, and a limited number of cattle—extent of field considered. But I need not expatiate; to the true American enough has been said to induce him to inquire, to examine, and not like the South the less because its resources are ample for every emergency. I may add—though the fact that some of us have 100 to 200 head of cattle, with only ten to twenty hands would induce a thinking man to know it without mentioning it—we do not feed our cattle or sheep, and seldom *feed* hogs.

It may probably be agreeable to some of my readers to know what I have that could eat provender, and then show the hands that I employ. I have 13 head of mares, colts and mules here, 4 elsewhere; some 75 head of cattle; (lost a number by high waters last winter;) 100 head of sheep; 125 head of hogs, nearly all improved Berkshire. Can ten hands feed the half of this number as you are forced to do, and then raise my average crop of seven bales, (for the last five years)? Then you will see what our climate and wild grass does.

The diseases of our farm animals have of course received much of my attention, and this again is in our favour, for the diseases can generally be prevented by good management, or are easy of cure.—As a rule, I have had far more success in this department of my doctoring, than when I practiced on the animal man. I provide for my animals an abundance of water, which I am compelled to do by digging out for a pool, and throwing up embankments, to catch and hold rain water; I keep them well supplied with salt, salt and ashes; sometimes sulphur and air-slacked lime. I have a long trough in an open shed 50 by 18 feet, and unless I have food in the trough, I keep salt there the year round. This prevents bots and colic in horses, as also other diseases. That bot story I am inclined to be a disbeliever in. When I meet with the symptoms of "*bots*" *or cholic*, I give about an ounce of laudanum in a pint of water, and if not relieved in a half or three-quarters of an hour, I repeat half the quantity, and so on, seldom repeating, and never the third dose given. I give salts after, or use a plug of fat bacon inserted into the rectum, about six inches long and three thick, made wedge shape, so as to insert readily.

The *big head* I have never failed to cure; my remedy is enough arsenic to make a pill about the size of a small garden pea; envelop it in fine muslin or silk paper; then cut down on the swelling through the skin, raise it a little and place under it the arsenic; confine with one or two stitches by drawing lips of wound together. After the flesh has dropped out, wash, poultice, &c., as for a sore; let the horse's food be grass only. I must here give due credit to "The American Farmer" for my practice.

The *big jaw* I have seen only once; the animal—a noble, high bred brood more—having it, I was anx-

ious to cure, and asked every body what to do, and as usual, every body knew, and prescribed very variously; but I took abler counsel; that farmer's friend "The American Farmer" was consulted. I followed the direction of Mr. Buvard of North Carolina, which was to burn with a dull chisel entirely through each tendon or muscle that leads from nose to eye. Having such confidence in my mare's courage, I did not cord her nose, and accordingly burnt through until I could see each end of the muscle and the bone underneath, about midway between the oye and nostril on each side. She also had two "blind teeth" in juxtaposition with the first grinder; knowing no harm could ensue, I punched these out easily. Soon after, the mare began to thrive; she had been well attended to; no man's horse could have received better grooming or higher feed, with water and an excellent pasture at control. Yet she continued to decline, and at length became so clumsy that she could not step over a rail. Five to six months has expired; she is now to every appearance well, and though not half feed allowed her, she has got in good condition.

Hooks I have experienced no difficulty in curing, by cutting through the skin on the nose below where the tendons above alluded to bifurcate, then with a baling needle, or some sharp pointed instrument, I pass under the tendon, having cut through the ligament that envelopes it; I raise it and twist the needle round, then cut the tendon and sew up the wound; the irritation and inflammation cures the eye or eyes. Weakness of eyes, or weeping, or the white film that sometimes forms on the eye, I treat with loaf sugar, powdered fine and mixed with lard; a little of this is wiped into the eye with the fore-finger once a day, after bathing with warm water.

The *hollow horn* in cattle of course I have seen only once or twice in this State. I then had a gimblet hole bored in a depending spot, and salt water poured therein. This disease I have thought to originate from bad keeping, and the above case was an ox that I had purchased when old and poor at that.—*Big head*, or similar diseases, attacking jaw, head or shoulder in cattle, I have never known treated, but think arsenic would cure either, thinking they are similar diseases.

The diseases of hogs have been more difficult to manage, but raising as many as we do, and at trifling expense, we never trouble ourselves much; at this time I must have over three pigs of three to six months old to each member of my family.

The *mange in hogs* I cure with sulphur in food, and washing with suds, or feed with poke root; or it boiled and the liquor fed with meal or grain.

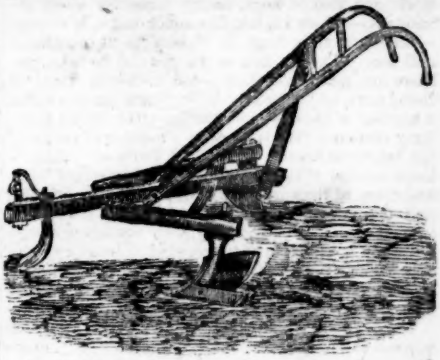
The *mange in dogs* I cure by washing them daily in tan ooze, and give sulphur occasionally.

The diseases in sheep have proven my master when they do occur, which is but seldom in our native flocks, but in my Bakewell crosses I have lost a large number, and generally about yeaning-time.

(TO BE CONCLUDED IN OUR NEXT.)

CHEAP PIT OR FRAME FOR PLANTS—Hovey's Mag. of Horticulture, in an account of a visit by the editor to the garden of Mr. Glendenning, of Scotland, mentions the mode of making a cheap pit or frame for the culture or preservation of plants. Sods six inches in width were cut, and firmly laid up, so as to form a wall, grass side down, to the required height. When they had become dry and settled the sashes were laid on them as on a common pit made with brick or wooden walls.

DOUBLE-BARRING & RIDGING PLOW.



To the Editor of the American Farmer:

SIR—By request we send you for publication a cut and this description of our Double-barring and Ridging Plow.

This plow as represented by the cut is made for barring and weeding the Tobacco crop, or what is termed the second process; the mould-boards are set to expand or contract, and regulated to cut 1¾ or 2¼ feet wide, and to bar the tobacco right and left by once passing of the horse. After this plow, may follow our Expanding Cultivator, made with two tines in front and a shovel behind, which will open and return the ridge of earth formed by this plow.

It will also be perceived that if a tine be substituted for the left hand mould board, and both the mould boards set on the right hand side *alternately*, that this plow will form one of the best barring and hilling cultivators for the corn crop.

For particulars see remarks relative to this plow by W. W. BOWIE, Esq. in Sept. No. of your Farmer.

R. SINCLAIR, Jr. & CO.

RULES FOR SELECTING NEAT CATTLE.—The following paragraphs taken from the Farmers' and Graziers' Complete Guide, an English work, contains so much good sense in so few words with respect to the selection of neat cattle that we take pleasure in commending them to our readers:

"Much has been written as to what breeds are best; and a considerably greater stress has been laid on this part of the question than is warranted by any positive result. There are good and bad of all breeds; and provided you select sound and healthy animals from a good stock, you will, if you treat them properly, have little to care for, and less to fear.

Always purchase cattle that have been fed on lands of as *poor* a quality as your own. It rarely happens that cattle purchased from rich lands thrive well on poor soils; but, on the contrary, those from poorer farms do well on good land. The choice of neat cattle, therefore, for the stocking of farms, must, in a great degree, be regulated by the nature and quality of the soil intended to feed them on.

It is also essential that the cattle should be young, as well as healthy and of a sound constitution; for the younger they are, the more likely they will be to do service."

To preserve Grapes—Put them in tight boxes or kegs, in alternate layers, with carded bats of cotton.

HUSSEY'S REAPING MACHINE.

OAKLANDS, (near Geneva,) N. Y.
26th August, 1845.

MR. OBED HUSSEY, Baltimore—

Dear Sir—Having housed all the grain crops of this farm, it is due to you that I should now frankly admit the removal of all my doubts in regard to the effectiveness and excellence of your "*Reaping Machine.*" The doubts expressed in my early correspondence with you arose from the many abortive attempts in this country and in England to produce a Reaping Machine, possessing power and simplicity and durability; most of them were complicated, and proved too fragile.

Soon after the arrival of your Machine, I tried its power and became readily familiar with the manner of using it; the result of my experience will appear from the following facts:

The Wheat Crop of this farm covered 104 acres, producing 2540 shocks, or 30,480 sheaves, as counted on the ground, and again when housed in the Grain Barn and Sheds.

The whole crop was cut by your Reaping Machine, in *eight days*, using one team, a boy to drive, and a man to manage the Machine.

The average quantity cut per day was 13 acres.

The largest quantity cut on any one day was 17 acres.

The longest period for working the Machine on any one day was nine hours.

Seven men were stationed on the field to bind the sheaves.

The cost of *cutting* the Wheat with your Machine is *twenty five cents* per acre.

The total cost for cutting, raking, binding and shocking, is *seventy eight cents*, and a fraction per acre.

The cost may be stated as follows, viz:

A man and team for 8 days at $1.50 per day	$12
A boy to drive for 8 days at 50 cts. per day	$4
Interest on cost of Machine and for wear and tear, say at 10 per cent	$10
	$26

Which is equal to 25 cents per acre on 104 acres. The seven men employed to rake and bind, received each $1 per day for 8 days, say $56—which sum added to the cost for cutting or reaping, gives a total cost of $82—or 78 88-100 cents per acre.

I have compared this cost, with the cost paid by my neighboring farmers this season, and find it vastly in favor of your machine. The individual in this town who harvested with the most economy, paid $1 13-100 per acre,—other farmers have paid from $1 25-100 to $2 per acre.

Since the wheat harvest, the machine has cut with signal advantage about 20 acres of oats.

The wheat and oats were cut with such neatness and precision that the gleanings were not sufficient to pay the labor of raking.

The machine remains in perfect order, and did not fail to perform all you promised.

I deem it one of the best labor saving machines ever offered for the advantage of the farmer; its effectiveness, simple and durable construction, have been witnessed with satisfaction by a large number of my neighbor farmers. Respectfully yours,

J. DELAFIELD.

☞The machine alluded to in the above letter is the low priced one at $100.

Murrain or Red Water in Cattle.—Mr. Joseph Dibley, of Oak Creek, Wisconsin, sends us the following recipe for this disease: Take two pounds of Epsom salts—pour on to them boiling water enough to dissolve them and stir in one-fourth of a pound of tallow. Give one-third of it warm for a dose, and at the end of seven hours give another third if needed, and after a similar interval the remainder. The first dose is generally sufficient.—*Prairie Farmer.*

To take Film from a Horse's eye—Blow loaf sugar and a little salt into the inflamed eye, and in most cases it will be relieved. Sassafras buds pounded and put in water, to stand till it becomes nearly as thick as cream, applied to the eye, is an excellent remedy for inflammation.

To destroy Insects—The water in which potatoes have been boiled, sprinkled over grain, plants, &c. completely destroys all insects in every stage of their existence, from the egg to the fly.

Cure for Proud Flesh in wounds.—Take equal quantities of soot and powdered charcoal, and sprinkle liberally in the wounds.

Cure for Fistula or Poll Evil—Clear the cavity as near as may well be, then fill it with powdered saleratus or pearlash.

THE ALPACA SHEEP.

With the view of bringing the subject of the introducton of the Alpaca, or the Sheep of the Andes, the more prominently before the agricultural community, we have had the above *cut* prepared, and embellish our journal for the present month with it. We have long seen, that the concentration of the enterprize and force of the farming and planting interests upon the three great staples of *wheat, cotton* and *tobacco*, was producing the evil of over-production, and that it could end in nothing but a ruinous reduction of values—a *reduction* which would, as it has, ultimate in withholding from the producers that remuneration which sweetens labor and remunerates industry. To toil without the anticipation of a just reward, is, perhaps, of all others, the most discouraging condition to which a people can be reduced, as it withdraws that noble incentive to human action, so essential to strengthen the sinews, and give an impetus to exertion. Thus impressed, we have for years, been engaged in what we conceived to be, the laudable desire, of encouraging our brethren to *diversify* the products of the soil, and thus bring about something like an equality in the relations of demand and supply, in the various fruits of the earth. We were well aware, that *excess* ever had, and ever would, operate to depress price, and as a consequence generate a feeling of disquiet unfriendly to social happiness, if not dangerous to that glorious bond of union, which has thus far bound us together as one people—for from our knowledge of human nature, we knew it was natural for man, when things may go wrong with him—when he may be struggling under the agonies of disappointed hopes—to look with a jaundiced eye upon every one around him more prosperous or fortunate than himself. And whenever we have seen the evidences of this feeling at work, we have thrown the mantle of charity over the object of this too apparent weakness, as we knew it was but the emanation of the feelings of his nature, over which he had but an indifferent control. By pursuing a judicious course of culture—by attention to the improvement of the soil—and by a wise accumulation and application of manures—the earth may be made to increase its products to almost any conceivable extent—and thus may *supply* be enhanced far, very far, beyond the point of *demand*—for although production may, by the aids we have enumerated, be greatly inflated, it is not so with the wants and necessities of the *people*, who are more or less governed by circumstances, and restricted by the *means* they may possess of procurement,—and as labor is the sole agent in the creation of wealth, those *means* always must bear a just relation to the labor employed in their accumulation; and the experience of the world will bear us out in the assumption of the proposition, that the labor is best rewarded which is most diversified.

Now, as we did not set down to write a homily upon political economy, but to introduce the *Alpaca* to the notice of our agricultural brethren, we will endeavor to sketch a brief history of this description of sheep, of its uses and habitudes, of its probable adaptation to the climate and physical resources of large portions of our country, and the profit likely to arise from their introduction among us.

Not desiring to be tiresome to the reader, we

shall not attempt to enter into any very minute details, but will content ourself with a brief statement of facts. The Sheep of the Andes may be said, *chiefly*, to consist of three varieties, tho' there are others. The *Alpaca*, the *Llama*, and the *Vicuna*. The two first have been for centuries *domesticated*, and each bear wool of excellent quality. While the natives, however, chiefly raise the *Alpacas* for their wool and flesh, the *Llamas* are rendered subservient, also, to the purposes of burthen. The wool of the first, is from 6 to 12 inches in length, of silk like softness and fineness, and averages, in their native mountains, from 8 to 10lbs. to the fleece. The wool of the latter, is somewhat coarse and shorter, tho' still very valuable; but the chief use made of the *Llama*, is, as we have premised, as beasts of burthen, and for meat. Providence appears to have designed them as the peculiar helpmates of the people of the Andes; for to truthfulness in the support of their burthens, they combine the property of long continued endurance, supporting themselves under loads of from 100 to 150lbs. weight through journeys ranging from 280 to 500 miles. All the productions of the fields and mines are transported on them, from the mountain regions to the seaboard; which journeys they perform without requiring any other food than the coarse grass and weeds which they gather at the different points of rest.

The *Alpaca* is a hardy animal, and like the Llama, capable of subsisting upon the coarsest herbage. In their native mountains they are accustomed to every variety of climate and weather,—at one time exposed to the scorching sun, and at another to the snow, the frost and rain—In their native pastures, the shepherd provides them with *bathing* places, in which they delight, and which, by removing from their skins the accumulations of filth, serves to maintain them in health and improve the texture and bulk of the fleece. We have said that the fleece of the Alpaca in the Andes averaged from 8 to 10 lbs., and we will here remark, that those which have been translated to England and Scotland, have largely increased their yields of fleece, having in some instances reached 17 lbs. being from 70 to upwards of a hundred per cent. above the maximum average in their own native mountains. When killed young, the carcass, dressed, will weigh 180 lbs. and their meat is said to be equal to that of any other breed of sheep. In size, when full grown they are as large as a deer. They live to be 12 years old, yielding each year a fleece of undiminished fineness and bulk.

In their native ranges, they endure every variety and inclemency of weather, without the least shelter, and receive no other food than what they obtain themselves. Therefore, there can be no doubt that they would prosper by a translation to any of our mountain ranges, whether in *New Jersey, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Mississippi*, or *Kentucky*; for in each of those states they could find pasturage equal if not better adapted to the growth of wool than they enjoy at home, whilst in the varied seasons and climates can be found all the requirements necessary to encourage and develope their systems.

The cost of the Alpaca, including that of purchase and transportation, would not exceed, delivered at any of our Atlantic seaboard cities, twenty dollars per head.

The demand for *Alpaca wool* in England within the last fifteen years, has increased nearly a thousand per cent. This is not to be wondered at, as in *fineness of texture, softness, and beauty of appearance*, it bears a strong resemblance to silk, and is adapted to the manufacture of the most beautiful shawls and the other finer fabrics. The wool in its natural state requires no washing, being free from grease. The *yarn* manufactured from the wool imported into England, is mostly sent to France for sale: there it is converted into the most beautiful shawls. The yarn brings from $1.50 to $3.50 per pound, according to its fineness, and always finds a ready market.

In conclusion, may we not ask, whether a regard to the permanent welfare of the agricultural interests of the country, and the claims of patriotism, do not concur in the propriety of importing a number of these sheep, with the view of testing their adaptation to our climate, and to the habits of our agricultural people? An investment of 2000 dollars would procure a hundred for each state, and form a beginning that would, in a few years, add its millions to the productive resources of the country.

EVIDENCE OF AGRICULTURAL IMPROVEMENT.

A correspondent of the *American Farmer* writes, that while on a Tour through Frederick county, Md. he visited the Farm belonging to Mount St. Mary's College, Emmittsburg, and was delighted with the excellent condition in which he found the crops, cattle and general husbandry of the whole concern.—He says:

"The College stands as is known, deservedly high in the estimation of the public for its excellence in morals, literature, and science; but few could expect that it could take the lead in an enlightened and improved system of Farming—Their fields of corn and clover were green and luxuriant, while all around in the neighborhood was withering and sickly through the severe drought that prevailed in that quarter—and why was this? Because the Rev. John McCoskey who supreintends the Farm, does not think the science of Agriculture unworthy of his gifted and active mind. He has discovered that deep ploughing, by affording the roots of the plants a retreat of coolness and moisture shields them from drought; while on the other hand, from the depth and looseness of the soil, the superabundant moisture escapes from the surface of the land, and provides against sowering and scalding. But the most striking feature that presented itself in this well conducted establishment was, the cattle—all being excellent of their class, remarkable for their milking properties, especially several young Durham Heifers with their first calves, who gave great promise of extraordinary

milking. The calves of these Heifers are being raised, and finer animals of their age can no where be met with— I aver, they might with great confidence of success compete for the premiums at any cattle show in the union.

The Dairy is attended to in the most particular and perfect manner: while inspecting the Milk House the afternoon's milking was brought in, and disposed of in clean pans both "sweet and shining." I I was perfectly astonished when told that the milk then in hand, was the yield of some 12 to 15 cows, old and young, none of whom were what may be termed fresh—there could not have been less than 80 qts., double this for the morning's milking, and you have one hundred and sixty quarts of Milk per day, and this too at a time when most farmers were complaining of the diminished supply of Milk and Butter, from their pastures being literally burnt up.—Again let me ask why was this? Simply, the superior culture of the College Farm, and the forecast of the Rev. Gentleman already spoken of, who had an extra bite for his fine Herd, in the corn sown broadcast, for that purpose, cut green; and the juicy succors thinned out from his fine fields of standing corn. On seeing all this, Mr. Editor, I could not resist the great desire I felt to gratify you with such striking evidences of Improvement in this corner of the State of Maryland.

The practice that obtains on this farm cannot fail to do much good, in the example it holds out to others, while to the patrons of the College, it must be highly gratifying to think their sons have at all times an abundant supply of milk; and fresh and wholesome vegetables from one of the best vegetable Gardens I ever saw. The Beef is no less excellent, as I saw feeding in the Meadows some dozen of splendid young steers, ready for the knife. I understand they slaughter their own Beeves, and never touch an animal that is not properly fed and in high condition.

I cannot close these hasty remarks without a passing tribute to the merit of the Lady who superintends the Dairy—she is an English woman, and understands the business thoroughly, in every respect. Her cream and butter in flavor, color, and quality were incomparable; it must be admitted, however, that she has the advantage of fine cattle and wholesome pasture; while the water that gushes from the Mountain and supplies the college and flows through the spring or milk house, is proverbial for its sweetness and purity. *Sept. 10th*, 1845. G.

HORTICULTURAL.

THE GARDEN.—Sir *William Temple* thus eloquently sets forth the beauties, the uses, and the divine origin of the garden:

"No other sort of abode seems to contribute so much to the tranquility of mind and indolence of body. The sweetness of the air, the pleasantness of the smell, the verdure of the plants, the cleanness and lightness of food, the exercise of working and walking, but above all, the exemption from care and solitude, seems equally to favor and improve both contemplation and health, the enjoyment of health and imagination, and thereby the quiet and ease of both body and mind. A garden has been the inclination of kings, and the choice of philosophers,—the common favorite of public and private men, the pleasure of the greatest and the care of the meanest,—an employment and possession for which no man is too high or too low.

If we believe the Scriptures, we must allow that God Almighty esteemed the life of man in a garden the happiest he could give him, or else he would not have placed Adam in that of Eden."

WORK IN THE GARDEN FOR OCTOBER.

Cabbages.—As we hope you have taken our advice to sow some of the early kinds of Cabbage seed, and that you have now plants ready to set out, we will redeem our promise to tell you how to prepare your ground and set them out so as to stand the winter. In the first place select a spot or bed that lies dry; manure it well, dig in the manure deeply and rake it well; then stretch a line *East* and *West* and lay up ridges 6 or 8 inches high 3 feet apart; fill up the ditch or hollow of the North side ridge with long manure, then plant out your plants on the side of the ridge just above the manure, say four inches apart. Next spring when the frost is out of the ground, scrape the ridges down so as to cover the manure deposited on the northern side, working round the plants. This will be the first working, the subsequent ones must be regulated by your own judgments, keeping it always in view, that if you desire your plants to grow they must be kept clean and the earth well stirred. As the plants advance in the spring in size you can draw them for collards and sprouts, so as to leave those you want to *head* to stand about 18 inches in the rows apart.

Horse Radish.—This is an appropriate time to set out beds of this excellent and healthful vegetable.

Currants, Gooseberries, Raspberries and Shrubs generally may now be pruned and planted out.

Radishes, Cress and Lettuce may now be sown in warm borders.

Broccolo Cabbages should receive a good hoeing for winter protection.

Asparagus Beds, if not cleaned and dressed before, should now have all the trash cleaned off and have a dressing of rotten manure worked in between the rows with a pitch-fork. After this has been done, strew salt over the bed sufficiently thick to whiten it.

Strawberries.—The early part of the month is a good time to set out new beds of strawberries. In selecting a place for your bed or patch, choose a deep, rich loam, with a southern exposure. Manure it generously with stable manure that has been well rotted,—any *rich* compost that has undergone the process of decomposition will answer. Dig this in as deeply as the spade will permit, and rake thoroughly. Then lay off your ground into beds 4 feet wide, with alleys 1½ feet wide between them.

As to the selection of plants, &c. the following from the Ohio Cultivator is very opportune:

"Select your plants from runners of this year's growth, and from beds that are young or in a healthy bearing state, otherwise many of them will be apt to prove barren and useless. As to the kinds, get any of the good sorts in cultivation that can be found in your town or neighborhood, and plant two or three kinds near together if you can get them, as they will assist in impregnating each other, and a larger crop will be obtained. If plants are to be obtained from a nurseryman, any of the following will be found excellent—(the first named is the finest of all, but should never be planted far separate from other kinds.) Hovey's Seedling, Large Early Scarlet,

Hudson's, Ross', Phœnix, Keen's Seedling, Elton, Myatt's Seedling—and for variety and late bearing a few of the Red and white Alpine or Monthly."

In planting set them out in rows 2 feet apart, the plants 18 inches apart in the row. After your plants are set out lay long straw between the rows, confining the ends of the straw with pegs to prevent its being blown away. In the spring remove this straw work between the rows of the strawberries, then lay down a fresh supply of straw, pin the ends as before advised, and you may calculate on harvesting a luxuriant and luscious crop of fruit, as the straw between the rows will serve to keep down the growth of weeds, to maintain moisture in the soil, and prevent the escape of ammonia from it.

Celery.—Let your Celery receive an earthing for blanching.

Culinary Roots of all kinds should be taken up before frost and put away where they will not injure from the alternations of freezing and thawing.

Endives.—These as they become full grown should be tied up for blanching.

Small Salading of all kinds may be continued to be sown on warm borders during all this month.

Rhubarb and Sea Kale.—The seeds of these vegetables should now be sown.

Shallots, Chives, Garlic, Rocambole, and the Medicinal and pot herbs generally may now be transplanted.

BUDDING THE PEACH—The editor of the Western Farmer says that the budding of the peach on a plum stock is an advantage to the tree in point of durability; that it will preserve it from the peach worm.

PROPAGATION OF FRUIT TREES.

A correspondent at Shepherdstown, Va., asks us to give him information upon the following points:

1. How to propagate fruit trees by the eyes.
2. How to propagate fruit by cuttings.
3. At what time the cuttings should be made—time and mode of planting them—and the kind of soil and exposure best calculated to ensure success.

ANSWER.—1. The propagation of fruit trees by the *eyes*, is termed budding or inoculating, which operation is mostly performed in the generality of fruit trees during the months of *July* and *August*, and is more successfully done in cloudy weather, in the evening, as the mid-day sun is apt to dry and shrivel the cuttings and buds, and prevent the union of parts, which under favorable circumstances mostly takes place soon after the operation has been performed. The bud or eye should be inserted on the north side of the stock, which will ensure it every possible advantage.

Method of Budding.—Having your cuttings, knives, bandages, (strips of matting) ready, fix upon a smooth part on the side of the stock, at whatever height you intend to bud it; with your knife make a horizontal cut across the bark of the stock quite through to the firm wood; then from the middle of this cut, make a slit downwards perpendicularly, about 1½ inch long, going also quite through to the wood, so that the two cuts together may be in the form of the letter T; then with the point of your knife raise the bark a little at the angles formed by the two cuts, in order to make room for the flat part of the haft to enter and raise the bark.

This done proceed with all expedition, to take off a bud, having immediately previous to the commencement, cut off all the leaves, leaving about an inch of the foot stalk to each bud, and holding the cutting in one hand, with the thickest end outward, then enter the knife about half an inch, or rather more, below a bud, cutting nearly half way into the wood of the shoot, continuing it with one clean slanting cut about as much more above the bud, so deep as to take off part of the wood along with it, the whole from an inch and a quarter to an inch and a half long; directly take out the woody part remaining in the bud, which is easily done by placing the point of the knife between the bark and the wood, at either end; but the upper is the preferable one, and with the assistance of the thumb, pull off the wood from the bark, which ought, if in good condition, to part freely; then quickly examine the inside, to see if the root of the bud be left, and if there appears a small hole, the rudiment of the young tree has gone with the wood, the bud is rendered useless, and another must be prepared, but if there be no hole, the bud is good; then place the foot stalks or back part of the bud between your lips, and with the flat part of the knife separate the bark from the stock on each side of the perpendicular cut, clean to the wood, for the admission of the bud, which directly slip down close between the wood, and the whole is inserted to within the eighth of an inch; let this part be cut through into the first transverse incision made in the stock, and the bud will fall neatly into its place, then draw the bud up gently so as to join the upper or cut end of it to the bark of the stock, where it will most generally first unite. Let the parts be then bound with a ligature of bass, previously immersed in water to render it pliable and tough, or in want of this, woollen yarn, beginning below the bottom of the perpendicular slit and proceeding upwards close round every part, except over the eye or bud, which is to be carefully preserved, and continue it a little above the horizontal cut, not binding it too tight, but just sufficient to keep the parts close, exclude the air, sun and wet, and thereby promote the junction of the stock and bud; finish by making the ligature fast.

In three weeks or a month loosen the bandage and let the stock and bud remain until the following month, when the stock is to be budded down to the eye or bud.

Propagation by Cuttings.—The cuttings must be young shoots of the last year's growth, which must be cut with a sharp knife from the tree; they must be from 6 to 8, or 12 to 15 inches long, according to their strength and manner of growth; plant them in rows 18 inches apart, the cuttings to be placed from 5 to 8 inches asunder; every cutting to be inserted two-thirds of its length in the ground. To maintain moisture it would be well to lay straw between the rows. The time to plant is as soon as the frost is out of the ground.

Exposure.—We think a north-west exposure best for an orchard.

Soil.—A deep loam resting upon a sound clay bottom, is upon the whole the best soil—but be the soil what it may, it should be ploughed deeply—subsoiled if practicable,—and put in the very best tilth. Coarse, strong manures should never be placed in the hole with young trees—a compost formed of mould from the woods, ashes and lime, would be found the best manure.

ON THE CULTIVATION OF FRUIT TREES.

Mr. S. B. Parsons, of the Commercial Garden and Nursery, Flushing, Long Island, N. Y. in a recent Review of the new work of Mr. *A. J. Downing*, on the *Fruits and Fruit Trees of America*, (which will probably be adopted as the standard work of this country,) make some remarks, of a character which we think will be perused with much interest and profit by our readers. We copy from that invaluable "*Magazine of Horticulture*," edited by Hovey, of Boston:—

Having recently erected some large vineries for the more full testing of all the varieties of the grape, I was very particular during my recent visit to Europe in making inquiries respecting the most approved method of pruning; and for this purpose visited all the vineries within my reach. I do not recollect an exception to the general reply, that the spurring method was decidedly the best, and produced the largest fruit at an earlier period in the age of the vine. Where the vine is partially cut down every year, as in the renewal method, it becomes weakened and exhausted, and much of that sap which should be devoted to the fruit, is spent upon the formation of new wood for the next year.

Roberts, who is deemed the only really practical writer on the vine, is very decided in his approval of the spurring method. Our own vinery has not been erected a sufficiently long time to enable me to speak from experience. I only give the result of careful inquiry. I am far from wishing to say that the renewal method is decidedly wrong, or that by it good fruit cannot be produced. On the contrary, I know many who succeed comparatively well with this mode.

* * * * In the land attached to our establishment, (about 250 acres,) we have a great variety of soil, a portion being gravelly loam, other parts heavy clay, and a large portion of that planted with trees, a rich loam. Although we have abundance of clay soil for all our purposes, we rarely use it, for our own experience strengthens the opinions of others that a clay soil is superior to a loam for no class of trees, and decidedly injurious to many. McIntosh, the best practical writer on the cultivation of fruits, says that peaches and apricots "require a somewhat rich and mellow soil, richer than that for the apple, and much lighter than for the pear;" that "apples delight in a soft hazel loam, containing a small portion of sand;" that "the cherry delights in a dry, light, and rather sandy soil;" that "plums are found to flourish best in a soil neither too light, nor too heavy and wet;" and that "a dry, deep loam is the best soil for the pear tree, when upon a stock of its own species: a gravelly bottom is good, provided there be sufficient depth of mould over it, and a clayey, wet, spongy bottom is the worst of all." He further states that climate has much less to do with fruit trees than soil, and that Pear trees planted on a lighter soil, are not subject to barrenness. In corroboration of this, we planted a few years since, a square of young pear trees, where the soil was a very heavy clay, but after two years' trial, found them doing so poorly, and making scarcely any growth, that we transplanted them in a loam, where they are now throwing out fine shoots. One of the largest nurserymen on New York Island, informs us that he finds it exceedingly difficult to raise apples on his soil, which is a stiff, retentive clay. A clay soil is particularly injurious to cherries, and for these we never use it. Pears and plums will unquestionably do better than any other fruits on a stiff clay, but our experience is very conclusive to ourselves, that even these succeed far better on a good heavy loam. The author very justly observes on page 326, that trees in a damp soil are much more liable to that serious enemy, the frozen sunblight; such being the case, they must peculiarly suffer in a clay soil, which is well known to be very retentive of moisture. It is mentioned, page 62, that R. L. Pell, on the Hudson, has been very successful in the cultivation of apples in a strong, deep, sandy loam, on a gravelly subsoil. A Perdigron plum stands behind my house, which has borne fine fruit abundantly for more than 25 years. I have also Seckel and other pear trees, that have borne well for the same length of time. In my own orchard are produced every year as large, fine, and healthy peaches, as in those parts of Delaware, where disease is comparatively unknown. Some of my Crawford's Melocoton measured last year more than nine inches in circumference, and of delicious flavor. Judge Strong, of this place, has peach trees that are, I am informed, at least 20 years old, if not much more, and still produce fine healthy fruit. I am strongly of the opinion that the most suitable soil for all fruit trees, is a good gravelly loam. All fruit trees discharge from the root more or less excrementary matter, which, if accumulated and retained about the roots, is injurious in a great degree. In a retentive clay soil this must inevitably remain, but in a porous, gravelly soil, the rain has free access to the roots, and washes away the injurious matter before it can produce any evil effect. The soil of Dr. Rhinelander, of Huntingdon, L. I., is of this nature, and he is remarkably successful in the cultivation of every variety of fruit. I do not recollect ever to have seen finer peaches, plums, apricots and nectarines, than I tasted in his grounds the last year.

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Budding—Training—Transplanting—Soil and aspect.—The editor of the "*Magazine of Horticulture*" also reviews the work of Mr. *Downing*,—from which we make the following extract:—

In the chapter on budding, Mr. Downing describes what he terms *American Shield budding*, which he gives a preference over the common English mode. It consists in leaving in the small portion of wood under the bud, which in the usual way, is taken out:—

"The American variety of shield budding is found greatly preferable to the European mode, at least for this climate. Many sorts of fruit trees, especially plums and cherries, nearly mature their growth, and require to be budded in the hottest part of our summer. In the old method, the bud having only a strip of bark with but a particle of wood in the heart of the bud, is much more liable to be destroyed by heat or dryness, than when the slice of wood is left behind in the American way. Taking out this wood is always an operation requiring some dexterity and practice, as few buds grow when their eye, or heart wood is damaged. The American method, therefore, requires less skill, can be done earlier in the season with younger wood, is performed in much less time, and is uniformly more successful. It has been very fairly tested upon hundreds of thousand fruit trees, in our gardens, for the last twenty years, and, although practised English budders coming here, at first are greatly prejudiced against it, as being in direct opposition to one of the most essential features in the old

mode, yet a fair trial has never failed to convince them of the superiority of the new."—pp. 21, 22.

The chapter on training contains many useful hints, but the author justly observes that "our fine dry summers, with the great abundance of strong light and sun, are sufficient to ripen fully the fruits of temperate climates, so that the whole art of training, at once the triumph and skill with English fruit gardeners, is quite dispensed with."

To us successful transplanting has always appeared one of the most difficult of the young practitioner's attainments. A tree may be placed in the ground, but to do the work thoroughly, and have the trees grow nearly as well as if they had not been moved, is a prominent mark of a good gardener. Nearly one half of all the trees set out in this country, fail from the want of a proper knowledge of transplanting.

The following remarks on the season for performing the work, are worthy of attention :—

"The season best adapted for transplanting fruit trees is a matter open to much difference of opinion among horticulturists; a difference founded mainly on experience, but without taking into account variation of climate and soils, two very important circumstances in all operations of this kind.

All physiologists, however, agree that the best season for transplanting deciduous trees is in autumn, directly after the fall of the leaf. The tree is then in a comparatively dormant state. Transplanted at this early season, whatever wounds may have been made in the roots commence healing at once, as a deposit directly takes place of granulous matter from the wound, and when the spring arrives the tree is already somewhat established, and ready to commence its growth. Autumn planting is for this reason greatly to be preferred in all mild climates, and dry soils; and even for very hardy trees as the apple, in colder latitudes; as the fixed position in the ground, which trees planted then get by the autumnal and early spring rains, gives them an advantage, at the next season of growth, over newly moved trees.

On the other hand, in northern portions of the Union, where the winters commence early, and are severe, spring planting is greatly preferred. There, autumn and winter are not mild enough to allow this gradual process of healing and establishing the roots to go on; for when the ground is frozen to the depth of the roots of a tree, all that slow growth and collection of nutriment by the roots is necessarily at an end. And the more tender sorts of fruit trees, the peach and apricot, which are less hardy when newly planted than when their roots are entire, and well fixed in the soil, are liable to injury in their branches by the cold. The proper time, in such a climate, is as early as the ground is in a fit condition in the spring.

Early in autumn, and in spring before the buds expand, may as a general rule be considered the best seasons for transplanting. It is true that there are instances of excellent success in planting at all seasons, except midsummer; and there are many who, from having been once or twice successful in transplanting when trees were nearly in leaf, avow that to be the best season; not taking into account, that their success was probably entirely owing to a fortunately damp state of the atmosphere at the time, and abundant rains after the experiment was performed. In the middle States, we are frequently liable to a dry period in early summer, directly following the season of removal, and if transplanting is deferred to a late period in spring, many of the trees will perish from drought, before their roots become established in the soil. Spring planting should, therefore, always be performed as soon as possible, that the roots may have the great benefit of the early and abundant rains of that season, and get well started before the heat of summer commences. For the neighborhood of New York, therefore, the best periods are, from the fall of the leaf, to the middle of November, in autumn; and, from the close of winter, to the middle of April, in the spring; though commonly, the seasons of removal are frequently extended a month beyond these limits."—pp. 41, 42.

The following, in reference to soil and aspect, at once explains the difference of climate in the same latitude :—

"Deep valleys, with small streams of water, are the worst situations for fruit trees, as the cold air settles down in these valleys in a calm frosty night, and buds and blossoms are very frequently destroyed. We know a rich and fertile valley of this kind in Connecticut, where the cherry will scarcely grow, and a crop of the apple, or the pear, is not obtained once in ten years; while the adjacent hill tops and high country, a couple or three miles distant, yield abundant crops annually. On the other hand the borders of large rivers, as the Hudson, or of some of our large inland lakes, are the most favorable situations for fruit trees, as the climate is rendered milder by large bodies of water. In the garden where we write, a fourth of a mile from the Hudson, we have frequently seen ice formed during the night, of the thickness of a dollar, when the blossoms of the apricot were fully expanded, without doing the least harm to that tender fruit. This is owing to the slight fog rising from the river in the morning, which, softening the rays of the sun, and dissolving gradually the frost, prevents the injurious effects of sudden thawing. At the same time, a couple of miles from the shores, this fruit will often be quite destroyed. In short, the season on the lower half of the Hudson, may, from the ameliorating influence of the river, be said to be a month longer—a fortnight earlier in spring, and later in autumn, than in the same latitude a few miles distant; the crops of the more tender fruits are, therefore, much more certain on the banks of large rivers and lakes, than in inland districts of the same climate."—p. 51.

BLASTED PLUMBS.—Mr. Daniel Taber, in a communication to the Editor of the Maine Farmer, says that the best remedy he has found against the effects of the Curculio on the plum, is *salt* spread around the tree as far as the branches extend; which should be applied early in the spring, before vegetation commences, from one to three quarts according to the size of the tree. He has not found it an entire remedy but has been much benefitted by it. He adduces several facts which go to show the value of this application as a preventive remedy.

THE BLIGHT.—ONE FACT.—Three years ago, a valuable pear tree, on the widow Harrison's farm was to appearance nearly dead with blight. At my request it was bored through the heart, with a five quarter auger. I saw it last month: it looked quite healthy.

Let us hear who has tried boring for fire blight in pear trees! Facts are what is wanted.

[*Ohio Cultivator*. E. NICHOLS.

FLORACULTURE.

BEAUTIFUL TRIBUTE TO FLORA.

The Boston "*Magazine of Horticulture*,"—a work by the bye, which should be in the hands of every admirer of the Goddess of the Flowers,—contains sundry portions of an address by Mr. Geo. Lunt, delivered before the Massachusetts Horticultural Society, at the dedication of their hall, on the 15th May last, from which we select the following chaste poetical tribute to Flora:

"Consider, then, the mother of the seasons in some of her infinite manifestations. You wander into the fresh fields and gather the flowers of spring. In crystal vases, resting, it may be, upon sculptured marble, you cherish these frail children of the sun and showers. You renew them before they wither, and gaze with exquisite delight upon their delicate texture and the manifold perfection of their hues. They appeal forever to your inmost heart, as silent mementos of all things sweet, and beautiful, and pure. They are eloquent of perpetual suggestions to the answering soul. They fill your mind more than all that lives upon the canvass of the mightiest master. The least and meanest of them all more satisfies your imagination than the choicest statue wrought by the divinest hand. To your cultivated mind they address themselves in their momentary beauty, like images of things more perfect in immortal loveliness. They are emblems of the affinities of your moral being with whatever is complete in infinite glory beyond the skies. Like the eternal stars, that, on the brow of midnight, assure us, with their unspeakable effulgence, that Heaven and its hopes are yet there, so these, the stars of earth, spring upon her verdant bosom, the mute memorials of an inscrutable immortality. In the humble dwelling-place of the poorest laborer, in some crowded city's dim alley, into which the golden light of day pours scarcely one beam of all his abounding flood, you may often discern some simple flower, which indicates the longing of our more spiritual being; which recalls to the mind's eye of the wearied man the green fields of his boyish days, and impresses him again and again,—oh, not in vain!—with the gentler and purer emotions of his childhood. They come upon him, amidst the dust and heat, and perhaps the wretchedness, of his daily lot, like outward manifestations of the inner spirit-world. They are the signals of thoughts

> Commencing with the skies.

They are like gleams of a fairer and brighter sunshine, from realms "beyond the visible diurnal sphere."

The time does, indeed, come to all men, when they would gladly escape from the crowd and confusion of common life, and

> Forth issuing on a summer's morn, to breathe
> Among the pleasant villages and farms,

would forget the thronging cares which have exhausted their hearts, in company with *the lilies of the field, that toil not, neither do they spin*. It is, indeed, by influences such as these, that we acquire not only fresher impulses to duty, but far higher and nobler principles of action. Experience, it is true, teaches us that the mere drudgery of rural pursuits can have little effect in raising the private or social condition of the man. To turn the verdant soil for the mere sustenance of life, would as little impress his mind with the true sentiment of his occupation, as the gloomy grandeur of ocean enters into the soul of the tempest tost and weather-worn mariner. The rustic laborer might forever follow his plough upon the mountain side, and trample with heedless foot upon the brightest flowers, that appealed with dewy eyes in vain to his plodding sensibilities; and the village maiden, obeying those truer and nobler instincts, inseparable, I believe, from every woman's heart, with every returning Spring, might gather and weave them into her rustic coronal. But to fulfil their highest ministry they must have become blended with their kindred associations. They must have linked themselves, as they have done, with the domestic, and public and religious story of the world. Their sweet and gentle names must have floated upon the voice of song. They must have given language of eloquent significance to the passionate impulses of the human heart. They must have spoken of the fragility of life under that sweetest and most soothing of all sad similitudes,—"a fading flower." They must have crowned the wine-cup amidst the revels of "towered cities," and mingled with the sunny locks of the queen of May upon the village green. They must have waved upon the brow of the returning victor, wreathed their modest tints amongst the tresses of the blushing bride, and reposed in pale and tranquil beauty upon the marble bosom of death. They must have proved their power to sound the secret well-springs of our hearts, and to draw up the sweetest waters beneath, hidden, as with a veil, by the intertangled sophistications and falsehoods of the world. They must have been won from their wild and unseen solitudes, and nurtured and cherished with a dear and reverent love.

But much as we love to meet them in their green retreats, or the fragrant meadow, by the rural roadside, or in the wild recesses of the rocks, it is as the friends and companions of our daily duties that we most welcome their sweet and holy ministry. Nurtured by our own hands, they become indeed the faithful solace of our cares, and the rich reward of all our pleasant toil. And then how more than strange is this wonderful result with which beneficent Nature repays our fostering charge! What miracle so marvellous, as this mysterious development, which we so disregard, because we call it the common course and order of creation! When the returning season fills our hearts anew with its returning hopes, we take the unsightly and insignificant seed. We bury it out of our sight beneath the dark, insensate earth The dews and the showers fall upon what might well seem to be its eternal bed. The sun reaches its secret resting place with a vital and incomprehensible energy. It awakens from its slumber, and no apparent elements of its original conformation remain. It starts into being under the new and ever-varying aspects,—till

> from the root
> Springs lighter the green stalk, from thence the leaves
> More aery, last the bright consummate flower
> Spirits odorous breathes. Par. Lost.

To Preserve Fruit Trees from Mice and Insects.—Apply early, in the fall, around the root, a thick layer of lime and ashes. It would be well to sink the earth around the tree about six or eight inches, throw in a few shovels full of the lime and ashes, and then cover up with earth, tramping it well down.—*Me. Farmer.*

Some one says that the water in which potatoes have been boiled, sprinkled over plants, completely destroys all insects, in every stage of their existence from the egg to the fly.—*N. E. Far.*

OCTOBER.

Auriculas, Polyanthuses and *Primroses.*—The *auriculas* in pots must be kept clean, and decayed leaves picked off and be watered moderately. *Polyanthuses* and *Primroses* should be similarly treated.

Carnations.—The carnation layers that were taken off in August and September, as well as those in pots should be kept clean and receive frequent waterings. Seedling Carnations may be transplanted into beds and borders as may be desirable.

Pinks.—The plants of this favorite of the garden may now be planted out in borders.

Tulip Roots.—The best time for planting out tulip bulbs is from the middle to the end of this month.

Hyacinths.—The bulbs of this flower may be planted any time between the 15th of October and the 15th of November. The beds should be loamy, dry and airy.

Biennial and *Perennial* flower roots of nearly all kinds may now be transplanted.

Double Daises.—About the middle of the month prepare a warm border and plant out these.

Bulbous Flower Roots.—As tulips, hyacinths, polyanthuses, may now be planted in pots or glasses for early blooming.

Flower Bulbs.—Select your flower bulbs, and set out those which require fall planting.

TULIPS & ROSES—The following is a pretty and pleasant epigram:

My Rosa, from the lattic'd grove,
Brought me a sweet bouquet of posies,
And asked, as round my neck she clung,
If tulips I preferred to roses?
'I cannot tell, sweet wife,' I sighed,
'But kiss me, ere I see the posies.'
She did—'Oh, I prefer,' I cried,
'Thy two lips to a dozen roses.'

LADIES' DEPARTMENT.

WOMAN—The following just and beautiful tribute to the character of Woman, is taken from Blackwood's Magazine:

Great indeed is the task assigned to woman; who can elevate its dignity? Not to make laws, not to lead armies, not to govern empires; but to form those by whom laws are made, armies led, and empires governed; to guard against the slightest taint of bodily infirmity the frail yet spotless creature whose moral no less than physical being must be derived from her; to inspire those principles, to inculcate those doctrines, to animate those sentiments which generations yet unborn and nations yet uncivilized shall learn to bless: to soften firmness into mercy, and chasten honor into refinement; to exalt generosity into virtue; by a soothing care to allay the anguish of the body and the far worse anguish of the mind; by her tenderness to disarm passion; by her purity to triumph over sense; to cheer the scholar sinking under his toil; to console the statesman for the ingratitude of a mistaken people; to be compensation for friends that are perfidious, for happiness that has passed away. Such is her vocation. The couch of the tortured sufferer, the prison of the deserted friend, the cross of the rejected Saviour—these are theatres on which her greatest triumphs have been achieved. Such is her destiny: to visit the forsaken, to attend to the neglected when monarchs abandon, when counsellors betray, when justice persecutes, when brethren and disciples flee, to remain unshaken and unchanged; and to exhibit in this lower world a type of that love, pure, constant, and ineffable, which in another world we are taught to believe the test of virtue.

Ointment for Inflamed Eye-lids—The following recipe was obtained from the late Dr. B. one of the most eminent physicians of Baltimore, and used in our family with unfailing success:

Take ½ dr. white precipitate, and 1 oz. lard—let these be well rubbed and mixed till there are no unbroken particles, but a smooth mass—anoint the eye lids two or three times in twenty-four hours, always night and morning. This ointment is also useful for common sores which children have on the nose.

Every housewife should keep this ointment by her.

Sago Cream—The following recipe is for a mess which is very grateful to the sick:

Take a dessert spoonful of sago, boil it in a pint of water to a jelly; add a tea-cup of cream, boil it again—beat up one egg very light, and pour the sago on while hot—sugar and nutmeg to your taste.

Pickling Walnuts—Altho' not now in season, we put the following on record for future use—handed us by a lady, from whom the foregoing were received:

Wash your walnuts and dry them as you place them in your jar; between each layer sprinkle alternately salt, and whatever spice you like—alspice, cloves, race ginger, mustard-seed, and horse-radish are what I use. Small jars are best—fill them with cold vinegar.

Recipe for Tomato Wine—To one quart of juice, put a pound of sugar, and clarify it as for sweetmeats. The above is very much improved by adding a small proportion of the juice of the common grape. This wine is believed to be far better and much safer for a tonic or other medical uses than the wines generally sold as Port Wines, &c. for such purposes. It is peculiarly adapted to some diseases and states of the system, and is particularly recommended for derangements of the liver.—*Prairie Farmer.*

Vinegar from Beets—A farmer in Detroit says—the last season I grated about a bushel of the sugar beet to a fine pulp, and pressed the juice therefrom, of which I obtained six gallons.

Rhubarb—This excellent plant, which should have a place in every garden, is very easily raised, requiring nothing more than a rich loamy situation. It is an orchard in miniature, the stems of its leaves affording a substance which is an excellent substitute for apples, to make sauce or pies.

The sauce made from it, is very wholesome and palatable, and will be a good preventive of bowel complaints.*

It is said that by stewing it with sugar and preparing it in the same manner as for the table, it may be bottled and corked up tight and preserved till winter.

Indeed, we do not see why it may not be kept as long as apple sauce, or any of the berries that are preserved in this way, without being bottled up—Some of our good housewives had better try the experiment.—*Maine Farmer.*

[*It is not only a "*preventive*," but a *cure*, even in their chronic forms.—*Ed. Amer. Farm.*]

Recipe for making Bread—Mr. Jas. Roche, a baker of Baltimore, well known for the excellency of his bread, has furnished for publication the following recipe for making it:—"Take an earthen vessel larger at the top than the bottom, and in it put one pint of milk-warm water, one and a half pounds of flour, and half a pint of malt yeast; mix them well together, and set away—in winter it should be in a warm place until it rises and falls again, which it will in from 3 to 5 hours—it may be set at night if wanted in the morning; then put two large spoonful of salt into two quarts of water, and mix it well with the above rising; then put in about 9 pounds of flour, and work your dough well, and put it by until it becomes light; then make it out in loaves. New flour requires one-fourth more salt than old and dry flour. The water should be tempered according to the weather; in the spring and fall it should only be milk-warm; in hot-weather, cold; and in winter, warm."

A wholesome Sweetmeat—Pare or not, as you please, a quantity of sweet apples, to fill an earthen or stone jar; add a little sugar and molasses, and, if the apples are not sufficiently juicy, a little water; cover with a thick paste of flour and water, and put into a brick oven with your bread. Let them stand until morning. They will have the flavor of baked pears, and can be had fresh at all seasons.

Dressing Wounds and Ulcers—Dr. Langier's method consists in applying, on the surface of the wound or ulcer, a solution of gum arabic, and on it a bit of gold beater's skin; thus dressed, a wound an inch in diameter was reduced in the space of eight days to one-third or one-sixth of an inch in extent. Cicatrisation took place so rapidly that the granulations, covered with a thick epidermis, were as numerous and visible as before, but could be touched without causing pain. A wound, produced by amputation of the breast highly inflamed, about 4½ inches in length and 1½ in breadth, under this treatment, healed rapidly, and purulent secretion did not take place. He proposes applying this method to a wound left by amputation of the thigh.—*Medical Times.*

METEOROLOGICAL TABLE, FOR SEPT.

Kept at Schellman Hall, near Sykesville, Carroll co. Md.
Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock, p.m.

	Wind.			Temperature			Remarks.
1	W	E	SE	73	81	75	Cloudy, Clear
2	E	SW	W	74	83	80	Cloudy, Clear
3	W	SW	W	74	86	80	Clear
4	W	SW	SW	75	83	79	Cloudy, Clear
5	N	N	W	70	75	73	Clear
6	SW	SW	N	60	75	73	do
7	W	W	W	63	85	83	do
8	W	NE	NE	67	79	70	do
9	NE	SE	S	63	68	67	Cloudy, Rain, 3-10 in. Cloudy
10	N	W	W	58	73	69	Clear
11	W	W	W	50	75	60	Do
12	N	N	N	60	73	65	Do
13	E	SE	SE	58	68	64	Cloudy, Rain, 6-10 of an in. fell
14	S	S	S	64	75	70	Cloudy
15	W	W	W	64	74	73	Clear
16	W	SE	S	60	75	70	Do
17	SW	SW	S	65	80	74	Cloudy, Clear
18	W	W	W	67	84	75	Clear
19	W	W	W	67	80	70	do
20	SW	SW	SW	60	80	78	do
21	E	N	N	65	63	60	Rain, 1-2 in., Cloudy, Clear
22	N	NW	N	50	67	54	Clear
23	W	S	SW	45	63	58	do
24	W	W	SW	50	65	64	do
25	SW	W	W	55	67	60	do
26	W	SW	W	49	69	64	do
27	SW	SW		55	75		do

A report promised last month by W. B. is not received.

BALTIMORE MARKET--Sept. 30.

Coffee, large sales have been made during the last month; Rio 7a8c, the advance in the last two weeks is ¼ to ⅜cts.; sales amounted to 31,200 bags; La Guyra 7¼a7½c.; *Cotton*, 175 bales N.C. 8c; La. 8, on time, last sales; Mobile 8, Upl. 7 3-8. *Fish*, Mackerel, No. 3, 5a5.25; Herrings, 3.37, good demand. *Flour*, languid, the English advices by the last steamer being in amount that a favorable change had taken place in the weather, and *that the crops would be gathered in without the likelihood of damage—business was brisk and Cotton quite firm*—Howard st. $4.50a4.56 asked, stock light; receipt price unsettled; City Mills uniform at 4 50, in demand; Susqueh. 4.50a4.62, no stock in market. *Wheat*, good to best reds 85a87c. and inferior to good 75a85; family flour White 95a105. *Corn* is steady, sales of Md. white 49a50c; of Md. yellow 50 a51. *Cloverseed*, sales of good to prime 5a5.25. *Rye*, Md. 62a63; no Penn. in market. *Oats*, Md. steady at 30a31c. *Timothy Seed*, medium to good and prime 2.50a2.75a$3 per bush. sales. *Flaxseed* $1.15a1,25. *Feathers*, 25a33c, according to grade. *Hemp*, Ky. dew rotted 4a4½, inactive. *Molasses*, Cuba 26c, NO. 31a31½; P.Ric. 27a31. *Plaster*, ton $3a3 75; ground 1.12 per bbl. *Provisions—Pork*, mess $14a14½, pri. 11½a12; *Beef*, mess $10½a11; No. 1, 9a9½; prime 7a7 25. *Bacon*, is firm; shoulders 7a7½; sides 7¾a8; ass'd 8a8½; hams 8½a10; Balt. cured hams 9½a11. *Butter*, West. & Pa. 11a12½. *Lard*, No. 1 West. in kegs 8¼a 8⅔; in bbls. 7¼a8¼. *Cheese*, Western, 6¼a7. *Rice* at $4¼a4½. *Sugar*, market quiet, sales NOr. $7.37a8; Por. Rico 7 50a8 25. *Whiskey* steady at 24c. for hd. and 25 for bbs. *Wool*, ranges at 27 to 40c for tub washed com. to fine washed Saxony and Merino.—*Cattle*, demand good for beef; prices ranged from 1. 50 to 2.75 per 100, on the hoof, equal to $2,50a3,25 nett. *Hogs*, supply and demand good; prices 4,50 for ord. to $5 for prime. Coupons of Md. 79a80—*Tobacco*, a fair demand for better sorts Md. but the com. sorts which sold freely during the last fortnight, are now less inquired for, tho' some sales are made. We quote infer. and com. Md. 2.50a3; midd. to good 3 50a5 50; good 7a7 50; fine 8a14; Ohio 3 25 for com. to $12 for new, demand good. Inspections

For the week ending		*Sep.* 5,	*Sep.* 12,	*Sep.* 19,	*Sep.* 26
Maryland,	*hhds.*	1425	1125	1211	1261
Ohio,		771	1244	1225	1781
Kentucky,		21	93	Mo. 21	10
Virginia,		0	0	1	3
		2217	2462	2458	3071

At Philadelphia, flour quiet but firm; for shipping 4.62 for ord. and fair mixed; 4.75 for select & Brandywine; rye flour scarce, 3.25; corn meal in demand at 2.37 for Pa.; wheat, sales ranging 88a100; oats 31 a32 for southern, prime 33½; Pa. 34a35. *Cattle*, beef $4½a6 per 100 lbs; hogs 4½a5½.

At New York, southern wheat 91a95; rye 68c; barley 60; flour, Georgetown and Brandywine 4.87 for new, 4 68a4 75 for old; Cotton, prices steady.

At Boston, yel. corn 56a58, prime white 55; oats 37.

AGRICULTURAL IMPLEMENTS—LABOR SAVING MACHINERY.—*GEORGE PAGE*, Machinist & Manufacturer, Baltimore st. West of Schroeder st. Baltimore, is now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from $85 to $200, and each simple, strong and powerful. His *Horse Power & Thrashing Machine*, he is prepared to supply at the low price of $125 complete; the Thrashing Machines without the horse power, according to size, at $30, 40, 65 and $75; Improved Seed and Corn Planters; Portable Tobacco Press; Portable Grist Mills complete, $135.

SALE OF VALUABLE BLOODED STOCK.

I will offer at PUBLIC SALE, at my Farm, 5 miles from Baltimore, on the 30th day of October, at 10 o'clock, A. M. the following valuable Stock, consisting of 2 full bred Holstein Bulls, 4 and 2 years old; 1 imported Holstein Cow; 2 full bred Heifers (Holstein), 3 and 1 year old; 5 Heifers, 7-8 Holstein, giving milk; 3 Heifers, 3-4 Holstein, giving milk; 12 half bred Holstein, good milkers. oc.1 EDWARD KENLY.

BRINKLEYVILLE ESTABLISHMENT!

The subscriber has in Market, most articles in the nursery line; especially to suit the South. His large collection of choice American Grape Vines cannot but accommodate all desirous of having the finest of grape fruit. Some vines of 2 or 3 years standing in the nursery will bear the first year after planting;—well rooted vines from 15 to 75 cents each according to kind, size and number to one order and remittance.

WINES from 40 to 75 cents per bottle, and from 15 to 50 dollars per barrel, according to quality and age; CORDIALS higher than wines. Grape cuttings from 30 to 60 cents per dozen.

SIDNEY WELLER.

Brinkleyville, Halifax County, N. C. Oc.1*

PLOUGHS, PLOUGH CASTINGS, &c.

J. S. EASTMAN has on hand a large stock of *superior made* Ploughs and Plough Castings, Cultivators, Harrows, Horse Powers and Threshing Machines, Cylindrical Straw Cutters of all sizes of IRON and WOOD Frames, Corn and Cob Crushers, &c. &c.—All the above are offered at very Reduced Prices at Wholesale and Retail;—Also Landreth's Cabbage and other Garden Seeds suitable for fall sowing. oc.1

NORTH DEVON CATTLE.—The subscriber offers for sale a few BULLS, HEIFERS and CALVES, of pure NORTH DEVON blood, from 6 to 18 months old. They have been bred with great care from the best stock in the country, are handsome animals, of good size, and in fine condition.

Prices from $30 to $50. Address or apply to

JOHN P. E. STANLEY,

Jy.—tf 46 S. Calvert st. Baltimore, Md.

LIME—LIME.—The subscriber is prepared to furnish from his depot at the City Block, Baltimore, ALUM STONE LIME of the purest description, deliverable at any point on the Chesapeake Bay or its tributaries, at such prices as cannot fail to please.

He is also prepared to furnish superior building Lime at 25 c. per bushel, in hhds., or at $1 per bbl. E. J. COOPER,

July. City Block, Baltimore.

THE WHEAT CROP.—The wheat crop promises to be unusually large this year, and the prospects for advanced prices being favorable, should induce the agricultural community to provide themselves with machinery to put their crops in the markets at the earliest period and in the best condition to command the highest market rates. The subscribers therefore, have made preparation to meet that object, by providing Machinery of best construction, which they offer for sale at the following prices, viz.

HORSE POWERS, for the draught of 2, 4 or 8 horses, at 75, 100 and $125 each. Powers at $100 and $125 are particularly recommended and warranted superior.

THRESHING MACHINES, adapted to be driven by the above powers, price 40 to $60, all made on the spike principle, (no cast iron used) and each spike secured with a screw nut and warranted not to break or cause detention by their use.

Driving BANDS for do. 8 to $10 each.

Rice's and Watkins' patent FANNING MILLS, warranted equal to the best patterns in the U. States, price 25, 30 and $45.

ALSO—CORN MILLS at $40; Corn and Cob CRUSHERS, 30 and $65; PLOWS and other Agricultural Machinery; TOOLS, GARDEN & FIELD SEEDS, a large and general assortment. For a description of sorts we refer to our general catalogue, to be had gratis. ROBERT SINCLAIR, Jr. & CO.

Agricultural Implement Manufacturers and Seedsmen,

July. 62 Light street, Baltimore.

"Spade labour, the perfection of good husbandry."

PULVERIZATION.

DECOMPOSITION.

EZRA WHITMAN, No. 8 *Eutaw street*, and No. 55 *Light-street*, has been appointed by the patentees, Prouty & Mears, of Boston, sole Agent in Baltimore and parts adjacent for the sale of the *Boston Centre-draught Plough*, with new gearing, &c.

By this admirable implement, confessedly "the best plough known in this country for beauty of work and pulverizing the soil," the labors of man and team are lessened one-half, while the power and steadiness of draught obtained are so great, that any depth or width of furrow is broken up, pulverized, and carried completely over, so as to bury any quantity of weeds, herbage, or long dung, with perfect ease and facility, and with the precision of the spade.

Prices, from 6 to 13 dollars, with extra point and share. No extra charge for *the new gearing*. Castings of every size and variety kept constantly on hand. Sep. tf

WHITMAN'S AGRICULTURAL WAREHOUSE, *No. 2 EUTAW STREET, opposite the Eutaw House.* ALSO for the accommodation of the Bay trade he has opened another House on LIGHT STREET, 2nd. door from Pratt; where will be found his new improvement in the way of Horsepowers and Thrashing Machines, together with a general assortment of all kinds of Agricultural Implements, such as Fanning Mills, which he warrants superior to any other, or they may be returned and the money will be refunded; also Plows on the same terms, a variety of Straw Cutters, Corn Shellers, Corn and Cob Crushers, &c. &c. &c.

Plough Castings always on hand, and all kinds of Repairing done at short notice and on reasonable terms.

Jy EZRA WHIMMAN.

AGRICULTURAL IMPLEMENTS.—FARMERS! we offer you this fall, PLOUGHS of the most approved kinds, viz. *the well tried Minor & Horton, Wiley*, and *Prouty & Mears Centre-draught Plough*, and *Points and Shares* for all kinds; all of *Northern make*, and composition metal.

We still have lots of those premium Corn-Shellers, so much praised by all who use them. All we ask is for you to try them. Our *prices will be reasonable.*

We also keep all kinds of GARDEN AND FIELD SEED, at No. 7, BOWLY'S WHARF, *Baltimore.*

Sep. 2t WM. GAWTHROP & SON.

JAMES MURRAY'S *CORN & COB CRUSHERS*—These already celebrated machines have obtained the premium by a fair trial against other Crushers exhibited at the fair held at Govanstown, Balt. co. Md. in Oct. 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO—Small MILLS, which received a certificate of merit, for $15—I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics. Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. Also, a second hand Steam Engine, 16 horse power, and the works for 2 Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by me, warranted to operate well.

☞Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer Office; or the subscriber.

Patent Rights for the Corn and Cob Crusher for sale.

Jy. JAS. MURRAY, Millwright, York near Light st. Balt.

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